Woodland Period Log Tombs in the Ohio River Valley

Allegra I.F. Ward

Honors Thesis in the Department of Anthropology

University of Michigan

April 2020

Acknowledgements

There are many people I have to thank for their help and support through the process of completing my thesis. First, I would like to thank all my friends who assisted me in various ways, such as listening to me talk about my thesis a lot and lifting me up when I felt discouraged. Most importantly, I would like to thank my dear friend, Rachel Smith, for reading every word of my thesis and generously offering crucial edits to improve my writing as a whole. I am also grateful for my family, specifically their reassurance in pursuing what I love and excitement in the path I have chosen.

This thesis could not have been completed without the research I conducted at the William S. Webb Museum of Anthropology and the Ohio History Connection. I would like to thank both museums for allowing me to work with their collections and willingness to help me bring this work to completion. The information gathered from the museums' collections was vital in the development of this project. Additionally, these visits would not have been possible without the generous donations by University of Michigan alumni to the Anthropology Department that provided me with sufficient funding to complete these research stints.

I would also like to thank the University of Michigan faculty and staff who assisted me in this process. Specifically, my thesis advisor, Dr. Rob Beck, for his willingness to advise me in this project and continual guidance. I am also thankful for the assistance given by my Honors Anthropological Archaeology advisor, Dr. Raven Garvey, including her constructive edits for my thesis drafts. Others that I want to thank are the faculty and staff of the university libraries, specifically in the Interlibrary Loan Office, whose quick responses and continual efforts were essential for receiving necessary sources and completing my thesis in a timely manner.

Lastly, I want to express my greatest gratitude to my graduate student mentor, Tim Everhart. If it was not for volunteering on Tim's Woodland Ohio Monumentality Project I never would have learned of the fascinating complexity of the Early and Middle Woodland period and ultimately pursued this project. Additionally, this project never would have come to pass if it was not for Tim's constant support and encouragement. Thank you so much, it truly was not possible without you.

Abstract

Since the early twentieth century Adena and Hopewell have been two of the most recognizable social units of the Eastern Woodlands. Mapping and excavations of the mounds constructed by both groups began in the mid-nineteenth century and continued steadily for a century. While the methods were often less systematized, the research gathered the majority of data utilized by archaeologists today to understand the mortuary practices and traditions of these groups. Through this work, log tombs were deemed a diagnostic burial practice of Adena societies of the Early Woodland period (1000 B.C. to A.D. 1), though they continued to be built and utilized by Hopewell societies during the Middle Woodland period (A.D. 1 to 400). To date, research has yet to fully address the diversity in the practice of log tomb construction and use, specifically if this variability aligns to broader trends in the Woodland period. In this thesis, I share the results of archival research through which I historicize the practice of log tomb construction by diachronically evaluating the relationship between construction techniques and mortuary practices to improve our understanding of the course of social complexity in the Eastern Woodlands.

Table of Contents

Acknowledgements……2

Abstract……...3

Table of Contents……...4

List of Figures……5

List of Tables……..5

Introduction……6

Background……8

Adena and Hopewell Lifeways……8

The Adena-Hopewell Dichotomy……...11

Log Tombs……..19

Methodology……23

Data and Analysis……25

Base of the Tomb……27

Tomb and Burial Covering……30

Presence of Post-molds……..33

Tomb Size……...35

Burial Demographics……36

Presence of Artifacts……..40

Typology……40

Log Tomb Regionality……52

Site Dates……...54

Adena and Hopewell Log Tombs……...57

Discussion……62

Conclusion……67

References……70

Appendix……...77

Appendix A: Radiocarbon Dates of Mounds with Log Tombs……...77

Appendix B: List of Sites Containing Log Tomb(s)……...79

Appendix C: Log Tomb Typology……..84

Appendix D: Log Tomb Data……97

List of Figures

Figure 1: Flooring Groups in Log Tombs……**28**

Figure 2: Graph of Log Tomb Area Distribution……..**36**

Figure 3: Example of a Log Tomb Constructed for More than One Individual, Wright Mound Feature 8, Burial Number 2……...**38**

Figure 4: Log Tomb Typology……**41**

Figure 5: Example of the Simple Log Tomb, Wright Mound Feature 17, Burial Number 8…...**42**

Figure 6: C&O Mound (15Jo9) Burial Number 2, Feature 8……**43**

Figure 7: Example of a Layered Log Tomb, Robbins Mound Tomb 28, Burial Numbers 74 and 75……**44**

Figure 8: Example of a Log Platform Burial, Robbins Mound Tomb 15, Feature 11, Burial Numbers 36, 37, and 38……**45**

Figure 9: Example of the Circular Pit Tomb, Wright Mound Feature 10, Burial Numbers 6 and 7…… **47**

Figure 10: Example of a Rectangular Pit Tomb, Wright Mound Feature 19, Burial 13……. **48**

Figure 11: Log Tomb in Coon Mound…… **49**

Figure 12: Adena Mound Burials 9 and 10……...**50**

Figure 13: Log Tomb in Caldwell Mound……**51**

Figure 14: Curve Plot of Site Date……**55**

Figure 15: Multiple Plot of Site Dates…… **56**

Figure 16: Pie Chart of Adena Log Tomb Typology……**58**

Figure 17: Pie Chart of Hopewell Log Tomb Typology……..**59**

List of Tables

Table 1: Regionality of Log Tombs by River Valley……**53**

Introduction

When a loved one dies, a community comes together to honor them and celebrate their life or transition into death or the afterlife. Funerary ceremonies are a global practice as each culture venerates the dead in a unique yet culturally specific way. These practices often have emotional and ideological significance that are frequently materialized with specific meaningful objects and facilities. In the case of archaeology, these materials, or at least the non-perishable ones, provide an avenue to reconstruct societal structure and identity (O'Shea 1984).

The social complexity of the prehistoric Eastern Woodlands can be understood by examining mortuary ceremonialism as expressed in non-perishable objects and wooden architecture. The Eastern Woodlands is a region that consists of the modern-day United States east of the Mississippi River and southern portions of eastern Canada. Groups living in this region during the last six millennia are known for the construction of earthen burial mounds, with the Adena and Hopewell being among the most noteworthy (Saunders et al. 2005). Their mortuary practices were constituted by a suite of burial practices including cremation and inhumation, completed in a variety of fashions, sometimes within specific funerary facilities. A particularly common mortuary facility within the Woodland Period (ca. 1000 BC to AD 900) was the log tomb, where one or more individuals were buried. The log tomb was generally considered a square or rectangular grave prepared with logs at the center of a mound (Greenman 1932).

While log tomb construction has widely been considered diagnostic of the Adena (e.g. Webb and Snow 1945), it is also known among the Hopewell (Prufer 1961). Adena and Hopewell are sometimes defined as groups that lived from approximately 800 BC to AD 400 in the Ohio River Valley, with the Adena preceding Hopewell. Debate regarding their distinction is discussed in more detail below but, broadly speaking, the two have been differentiated based on a series of

diagnostic material remains (e.g. platform vs. tubular pipes, stemmed vs. notched points; presences of bladelets, etc.) and structural features (e.g. conical vs non-conical mounds, paired-post buildings vs. charnel houses, etc.), resulting in a reliance on trait lists to categorize excavated sites, predominantly for the Adena. These trait lists were a useful early heuristic for organizing data, but they rely on classification methods that lack explanatory power, fail to address variability, and fail to relay social or religious practices and structures of the past (e.g. Webb and Snow 1945). Log tombs are a burial type that is categorized within trait lists that ultimately lack the depth and analysis necessary to understand their diversity and variability, from the way tombs are constructed to the number of individuals within a tomb and the way in which they were interred. Published research has yet to fully conduct a comparative analysis of log tomb construction techniques, but through my own research the variation has become more apparent.

This research will attempt to historicize the construction and use of log tombs in the Ohio River Valley, increasing our understanding of patterns of variability within and between sites. By relying on past publications and museum archives, the necessary data for such an analysis can be assembled, built upon, and compared. Additionally, my research will expand our understanding of the practice of log tomb construction as something both time-transgressive and inter-societal. Diachronically analyzing the relationship between construction methods and mortuary practices, as seen in log tombs, will ultimately align the practice with the social complexity of those living during the Early and Middle Woodland periods.

Background

Adena and Hopewell Lifeways

Understanding the way in which Adena and Hopewell people lived and the traditions they practiced is important for contextualizing log tombs, one of their common burial practices. These social groups were comprised of small, local communities that were fairly sedentary but subsisted primarily on resources obtained through hunting, gathering, and fishing though supplemented with domesticated plants (Abrams 2009). The artifacts found in association with many burials demonstrate their elaborate practices of craft production utilizing many exotic materials, which, in turn suggests participation in larger exchange networks (Henry and Barrier 2016; Everhart and Ruby 2020). Such elaboration supports a shared identity (e.g. religious practices, rituals, iconography, etc.) across these small desperate communities that were likely socially interrogated through attendance and participation in ceremonial gathering hosted at earthworks centers (Abrams 2009). These communities remained decentralized, with a multitude leadership roles that were largely spiritual or sacred in nature (Carr and Case 2005; Beck and Brown 2011).

Log tombs, and the artifacts associated with them, demonstrate the effort that the Adena and Hopewell put into the preparation and construction of their burials, suggesting that the individuals buried within the tomb must have held a significant role within society. However, the Adena and Hopewell are generally considered to non-hierarchical but heterarchically quite complex (Greber 1979). Edward Henry and Casey Barrier (2016) attempt to construct what leadership roles would have looked like in a heterarchical society. They explain:

> as individuals assumed temporary leadership positions their actions and levels of success would have been assessed by others, leading to real-time evaluations of

> their accountability to the group to perform important roles (e.g. organizing and leading hunts or ritual ceremonies, obtaining exotic materials and/or crafting important items and so on)… The temporary or situational status positions of worthy individuals, therefore, could be translated into durable forms of memorialization, such as access to monumental burial" [Henry and Barrier 2016:90]

Henry and Barrier (2016) give a clear indication of how individuals came to hold significant roles within society, often demonstrated through the burial treatment chosen for that individual. In the article, there is acknowledgement that such roles could be with or separate from ritual.

Other archaeologists focus specifically on the religiosity of these groups and the role that played in their societal structure. Robin Beck and James Brown analyzed two mounds, one Mississippian and one Hopewell, to compare their cultural patterns, specifically regarding religious movements (Beck and Brown 2011). When considering the spirituality displayed in art, they explain that:

> in much of Hopewell representational art, and particularly with respect to humans in art, we see not depictions of specific supernatural figures or events that are recognizable because of their routinized details, but unique, stylized, and highly personalized representations of an act regularly performed in religious events—the spiritual transformation of a human to its animal familiar in a state of induced trance [Beck and Brown 2005:82]

In this way, Hopewell differentiates from the Mississippian in that they follow a much more individualized spiritual experience rather than kin-based and ancestral focused experience. They

conclude that this distinction explains the contrast between Mississippian and Hopewell ritual practices. Overall, the Mississippian demonstrate more routinization than the Hopewell, in turn influencing their social structure to further rely on kin-based constituencies.

While Beck and Brown conclude that Hopewell is more esoteric when compared to Mississippian societies, other studies support a progression of leadership through the Woodland period. Carr and Case (2005) address this in their chapter "The Nature of Leadership in Ohio Hopewellian Societies" in which they analyze Hopewellian burials and ceremonial centers to delve further into the topic. "We conclude that Ohio Hopewell leadership was (1) highly diversified; (2) a mix of classic shamanic, shaman-like, other sacred, and, much more rarely, mixed sacred–secular or secular positions; (3) decentralized; and (4) institutionalized to only a moderate degree" (Carr and Case 2005:231). Their findings support the idea that shamanism was still prevalent in many sacred leadership positions, but there was an increase in diversification of roles, specifically regarding secular roles, leading up to and during the Middle Woodland period. They explain that "Leadership diversification is necessary to accommodate societal growth" (Carr and Case 2005:232).

In addition to an expansion and segregation of leadership roles from Adena to Hopewell, there was also more specialization of craft production and a growth in construction of monumental earthen structures (Abrams 2009; Everhart and Ruby 2020). All of these aspects indicate an increase in social complexity from the Adena to Hopewell. Burial practices and their associated artifacts can also be an important way to address the cultural transition from Adena to Hopewell. More thoroughly researching log tombs can build onto our understanding of leadership roles and their treatment in death in the Early and Middle Woodland periods.

The Adena-Hopewell Dichotomy

The Adena and Hopewell Cultures have been two of the most recognizable cultural groups of the Eastern Woodlands. Yet, the cultural scheme from which these social units are defined remain contentious, specifically in regard to whether they represent one or more moundbuilding cultures (Clay 2005; Greber 1991, 2005). As explained by archaeologist Darlene Applegate, the classification of Woodland taxonomy by arbitrary groups, periods, or regions causes confusion and limits archaeologists' interpretations of the peoples' social complexity as it lends itself to a "recycling of modifiers, inconsistent use and misapplication of units, conflation of group and class units, and conflation of archaeological and sociocultural units" (Applegate 2005:5). These cultures have been separated largely on the basis of a series of diagnostic traits and artifacts (Webb and Snow 1945). Diagnostic traits, specifically burial practices such as the log tomb, are used to help distinguish the cultural dichotomy of Adena and Hopewell. In this section, I will explore the history of the Adena and Hopewell dichotomy in order to better understand the culture of the Eastern Woodlands during the Early and Middle Woodland periods, and ultimately their connection to log tombs.

The distinction between Hopewell and other groups began with various excavations in Ross County, Ohio, by William C. Mills in the early 1900s (Mills 1902, 1906). The Hopewell, who were first viewed as a single moundbuilding society within the Eastern Woodlands, were quickly divided into multiple cultures as the complexity of sites and variation in traits became apparent (Mills 1917; Shetrone 1920). The Fort Ancient site was attributed to one cultural group, now called Hopewell, defined based on their practice of constructing burial mounds (Putnam and Metz 1886). In 1906, Hopewell was distinguished from Fort Ancient in Mills' work at the Baum

site (Mills 1906). However, Fort Ancient was incorrectly classified as predating Hopewell, when it was later confirmed that Fort Ancient actually followed Hopewell.

Mills' (1902) excavation of the mound on the Thomas Worthington's property was when the Adena were first brought into conversation, however, Mills originally distinguished the people who constructed the Adena Mound as an earlier, subculture of Hopewell (Mills 1902). It was not until Mills' later excavation in 1915 at Westenhaver Mound in Pickaway County, Ohio that he linked the mound's unique characteristics with that of the Adena Mound (Mills 1902, 1917). He explained that Westenhaver Mound "…shows that it belongs to the early Hopewell culture, and in many ways resembles the Adena mound…" (Mills 1917:284). In doing so, he claimed that their distinct, often conical, mounds were markers of the existence of an early Hopewell culture that displayed the culture's development over time. He defined them in this way because of the continuity of traits with only slight variations, possibly indicating cultural development: "in tracing the history of the Hopewell culture, we have something very definite. The evolution from a lower to a higher plane is exemplified in the Adena and Westenhaver stages, with such mounds as the Harness and the Seip intermediate, and the Hopewell and Tremper mounds representing the highest development" (Mills 1917:284). However, continuing excavations and research by archaeologists such as Shetrone and Greenman established the Adena as their own culture (Shetrone 1920; Greenman 1932).

Following this publication, H.C. Shetrone outlines the distinctive traits in the "Adena type of mounds" and respectfully disagrees with Mills' decision to define Adena as part of Hopewell (Shetrone 1920:159-161). Instead, he concluded that:

> While the affinities of the Adena type of mounds are apparently strongly with the Hopewell culture… there are many fundamental differences between the traits of

> the two groups. Aside from the use of copper and other material from distant sources, very few traits of the Adena type will be found to correspond in any degree to those of the Hopewell type [Shetrone 1920:160]

In laying this out, Shetrone is the first to distinguish the Adena as a separate culture from Hopewell. While he determined this with a thorough analysis of the two social groups, specifically in regard to their traits, he did so in an explanatory way rather than presenting the data to the reader.

Mills and Shetrone defined the Adena and Hopewell, respectively, primarily by the presence or absence of particular traits. Emerson Greenman sought to build on this by laying out each culture's defining characteristics (Greenman 1932). Rather than summarize the traits, Greenman developed tables of defining traits with a corresponding list of mounds that included those traits (Greenman 1932:420-449). His list totals to 59 traits which include a range of variables such as burial traits (e.g. log tombs, sub-floor graves, bark-prepared graves), structural traits (e.g. conical mounds, mounds in an enclosure), and diagnostic artifacts (e.g. copper bracelets, pearl beads, bone awls) (Greenman 1932). Greenman also extended the region of the culture-history outside of the Scioto Valley and Ohio by including in the tables "the contents of seventy mounds, distributed in Ohio, Indiana, Illinois, West Virginia, Pennsylvania, and Tennessee…" (Greenman 1932:412). In doing so, he came to the same conclusion as Shetrone (1920) that Adena was a distinct culture from Hopewell following his analysis of Mills' excavations, but more evidence was needed to definitively distinguish them (Greenman 1932:487). However, he does point to one trait that could be used as reliable evidence, explaining that "…there is at least one element of the Adena culture which is strongly suggestive of a developmental process with its end-point in the Hopewell, namely, the relative size of the log tomb considered in connection with the proportions

between cremation and inhumation" (Greenman 1932:488). Greenman pointed to the significance of the log tomb in its ability to further parse out the relationship between Adena and Hopewell.

During the depression era, the Works Progress Administration (WPA) and Civilian Conservation Corps (CCC) ran many projects, such as mitigation for dams, archaeological excavation, and other public works, with the help of federal funds for relief labor. The archaeological projects, referred to as New Deal archaeology, heavily focused on mound excavation, gathering more evidence for the Adena culture and continuity in its traits (Webb and Snow 1945; Fagette 1996). Beginning in the 1940s, William S. Webb and colleagues worked to develop cultural trait lists and reevaluate the understanding of Adena based on these additional excavations. This work culminated in the publication of the landmark volume *The Adena People* (Webb and Snow 1945), which at the time was the most comprehensive classification of Adena and most thorough investigation of their relationship with Hopewell. Webb and his colleagues' (Webb and Snow 1945; Webb and Baby 1959; Greenman 1932; Shetrone 1920; Dragoo 1963) trait lists were extensive, with some of the more significant traits of Adena including: construction of earthworks (conical mounds, earthen embankments, and sacred circles), presence of log tombs, and a variation of communal and individual interments. Other traits included have been discredited over time and with advances in archaeology. For example, paired-posts, typically meaning the presence of post-molds at the base of mounds, was attributed to a domestic structure but further research has critiqued this initial conclusion by connecting them to a ceremonial significance rather than evidence of a prior domestic site (Seeman 1986; Clay 1998).

The early conceptualization and organization of Adena traits were made without the benefit of radiocarbon dating. Temporal assessments were made using relative techniques, particularly stratigraphy and artifact seriations (Lynott 2015:22). For this reason, it was difficult for researchers

to establish the relationship between Hopewell and Adena in absolute time. The chronological ordering of Adena and Hopewell was made because cultures were generally assumed to have developed linearly and Hopewellian material symbols were more elaborate, diverse, and numerous (Webb and Snow 1945). Upon the invention of radiocarbon dating by Willard Libby, Adena and Hopewell mounds were some of the first sites to which this technique was applied (Libby 1952, 1955). From this, Adena and Hopewell were put on more stable chronological footing (Griffin 1952). However, through the years there have been problems with the methods and use of such techniques in Ohio Hopewell archaeology: "…archaeologists have simply ignored dates that did not meet their preconceived ideas…[and they] have also been too quick to submit a datable sample without considering how that sample was created and how it was deposited in the location where it was collected" (Lynott 2014:60). Such misuse of techniques is problematic for accurately assessing the chronology of Adena and Hopewell sites, which is further aggravated by the limited number of radiocarbon assays, the cost of which is sometimes prohibitive.

R. Berle Clay has more recently called for collapsing the Adena-Hopewell separation altogether. In his book chapter "Adena: Rest in Peace?" Clay explores the cultural systematics of the Eastern Woodlands and its implications on our understanding of the Adena today (Clay 2005). Clay explores the development of the culture-historical approach to the Eastern Woodlands and archaeologists' various attempts to connect Adena to other cultures, such as groups in Mesoamerica. Rather than considering Adena and Hopewell to be separate groups, Clay argues that the development of the culture-historical approach for the Eastern Woodlands is problematic and skews our interpretation by affiliating new finds with an already defined group. He explains that the term Adena "…has far too many implications and assumes far too much similarity between cultural entities, even within the central Ohio Valley" (Clay 2005:109). When these

archaeologically determined cultures are distinguished, he explains, the process of local sequence is overlooked and therefore the term Adena should no longer be used because, in fact, our current notion of the Adena culture actually never existed. Clay clarifies "because the mounds were well excavated, I continue to find them important sources for new ideas about the ritual they represent, but I am less and less willing to view them as products of a unitary phenomenon" (Clay 2005:108). By focusing on the variation between what is classified as Adena in different regions, and disconnecting it from its old affiliations, Clay maintains that more will be understood about the role culture dynamics play in the production of earthen mounds and enclosures.

While Clay works to move away from the Adena-Hopewell dichotomy, other archaeologists opt to keep the distinction and focus on regional evidence. Through different research, it is apparent that the Adena do last longer outside of Ohio and that evidence for Hopewell is only found in the Scioto Valley (Greber 2005). Deborah Black focused on the Woodland period within the Ohio Hocking Valley and found that no evidence for Hopewell existed within that valley (Black 1979). Black denotes four possibilities for why this could be: 1) the Hopewell sites have gone unnoticed; 2) an eastern dispersal of Adena developed outside of the Ohio Valley as a result of competition between contemporaneous Adena groups and Ohio Hopewell; 3) the Hocking Valley Adena formed a cultural matrix that outlasted the changes of surrounding communities; or 4) that the Hocking Valley was abandoned during the period of Hopewell due to changing subsistence strategies (Black 1979:24-25). Black concludes that "Of the four hypotheses offered to explain an absence of extensive Hopewell occupations in the Hocking Valley, the latter three offer the greatest potential as guides for further research" (Black 1979:25). Ongoing research and excavations supported the latter three hypotheses proposed by Black and also found no indication

of Hopewell outside of the Ohio Scioto Valley (Webb and Snow 1945; Greber 2005; Dragoo 1963).

N'omi Greber approached this problem by comparing the Adena and Hopewell type sites. While Greber did not make any definite conclusion concerning the applicability of this distinction outside of the central Scioto Valley of southern Ohio, she did determine that it holds within the Scioto Valley (Greber 2005). She points out that many mounds in the Middle Ohio Valley have been excavated and not identified with either Adena or Hopewell: "a review of reports since 1960, done in order to classify Ohio mounds as 'Adena' or 'Hopewell,' suggests that one third of the sample is unclassified… In some cases… researchers have differed on the placement of the same site" (Greber 1991:2). This ultimately emphasizes the problems that can come with culture-history in archaeology. In Greber's comparison of the type sites, she attempts to better understand the distinction and gives four contrasts between (earlier) Adena and (later) Hopewell culture:

> …a basic change from a single group's use of vertical space for interments and other ceremonial/ ritual/ civic activities; a great increase in both the quantity and forms of artifacts produced in mica, copper, and marine materials; the addition of other exotic and local raw materials used for symbolic objects; and a significant increase in the size and complexity of archaeologically recoverable civic/ ceremonial/ ritual remains [Greber 2005:30]

Central to Greber's (2005:30) visions of this cultural dichotomy is log tomb construction and its corresponding burial practice. Thus, a comparative analysis of log tombs across sites would address these four points laid out by Greber (2005:30), adding information to further interrogate the Adena/Hopewell dichotomy which has persisted through the reliance on trait lists.

The log tomb is one of the important practices that plays a significant role in the distinction explained by Greber. It is a burial practice that is widely considered diagnostic of Adena but still seen in the Hopewell. Additionally, log tombs are one of several burial practices that are labor intensive and require extensive social coordination. As explained by Greenman (1932:488), the log tomb is one of the diagnostic traits that can display the cultural development that may have occurred from the Adena to the Hopewell, ultimately increasing our knowledge of the relationship between Adena and Hopewell as social units.

More recently archaeologists have opted to drop the Adena-Hopewell distinction completely and focus on a particular social phenomenon. For example, Edward Henry (2016; Henry and Barrier 2017) has recently employed the term Adena-Hopewell to his work in the Kentucky Bluegrass region as a heuristic technique to avoid the debate laid out above. In doing so, he focuses on the continuity of social processes in the region, specifically, "… to trace associations between the actions of the living, the placement of the deceased (i.e., ancestors), and the deposition of ritually-charged craft items" (Henry 2017:190). This tactic is useful in emphasizing the complexity of the region instead of viewing one culture as simply a precursor to another. However, as determined by Greber, the cultural distinction is still significant in certain regions (Greber 1991). She specifically references the Central Scioto Valley where the distinction is clear, leaving room for understanding the intergroup interaction or chronological progression.

For the purposes of this research, I will be dropping the Adena-Hopewell distinction for most of the data and analysis chapter to examine all log tombs as Early/Middle Woodland given the wide reach of log tombs across the greater Ohio River Valley. At the end of the chapter, I will bring the Adena-Hopewell dichotomy back into discussion and apply it to log tombs based on if the mound is defined as Adena or Hopewell.

Log Tombs

As early as the 1840s, Ephraim G. Squier and Edwin H. Davis (1848) began the initial surveys and excavations of burials mounds for their publication *Ancient Monuments of the Mississippi Valley*. While they surveyed many sites throughout Southern Ohio, only select sites were chosen to be excavated. At these sites, mound exploration was done very precisely for its time but still far from the standards of systematized excavations today. As a result, their work mainly focused on uncovering burials and collecting any artifacts associated with those burials. Many of the graves they discovered were log tombs, but no classification of grave types was in place at the time of their excavations as was the case with many excavation reports from the mid to late 19th century.

Mills' excavation of the Adena Mound showed the rise of terminology for burials enclosed by logs but was yet to designate the practice as a method of the Adena. Even as a more concrete classification of burial types developed, the specific terminology for log tombs still varied by author. Mills opted for the term sepulcher, which he described as "constructed from unhewn logs lain upon one another, and were then covered over the top with logs that were smaller than those at the sides and ends" (Mills 1902:454). Other authors chose to refer to such a structure as a log pen, log crypt, or log crib when describing a similar type of burial method (e.g. Shetrone and Greenman 1931; Prufer 1961). However, most publications and reports classified this burial type as a log tomb.

In 1932, Greenman attempted to layout one of the earliest forms of an Adena trait list in the "Excavation of the Coon Mound and Analysis of the Adena Culture" (Greenman 1932). Log tombs were listed second of the 59 traits on the list. The trait list was composed with data from 70 sites. The reliance on trait lists was beneficial for establishing which sites had one or more log

tombs but did not go further to analyze their relation to one another, outside of the use of logs as the main material, or particularly the tombs' differences. By generalizing all log tombs into one category, attention was drawn away from the complexity of the practice and construction of log tombs and their connection to cultural trends.

While log tombs were a trait that archaeologists took the time to carefully document and often include in publications, little effort was put forth in comparing characteristics of tombs across sites. William Webb began developing typologies for log tombs in his excavation reports of Adena sites in Kentucky. However, with each publication he established a new typology rather than applying the new findings to his prior categorization (e.g. Webb 1940; Webb and Elliot 1942). Eventually, in *The Adena People*, Webb and Snow (1945:44-52) attempted to create categories based on tomb traits present across Adena sites. Webb and Snow brought in more data from mounds in Kentucky along with further analysis of Greenman's list of sites. By doing so they then could create a new trait list which included all of the sites. In the list, the log tomb itself was broken down into more than one trait. The trait list had an individual section designated for tomb traits, which included 17 different traits.

The tomb traits laid out by Webb and Snow (1945) served as a guide for ongoing research and assessment of Woodland Period, specifically Early Woodland burial practices (e.g. Dragoo 1963). However, rather than relying on a single variable to establish a typology, the traits were determined by any significant aspect of a tomb. For example, the traits were defined by variables such as the materials used, the design of the tomb, presence of post-molds, primary mound covering, etc. This arbitrary nature of assigning tombs made it difficult to cross analyze tombs and fell short of thoroughly analyzing the complexity of the tombs. While the tomb traits demonstrate

the typical tombs and aspects of tombs present during the Early Woodland Period, it leaves little room for analyzing log tombs specifically and their relationship between sites.

Despite log tombs being considered diagnostic of the Adena, exemplified through Webb and Snow's trait list (Webb and Snow 1945), Prufer addresses them as a characteristic of Hopewell (Prufer 1961). In his dissertation, he lists five Hopewell tomb and ceremonial structures' characteristic traits: crematory basins, burial platforms, log cribs, stone cist graves, and charnel-houses. Contrary to *The Adena People*, Prufer defines the characteristic solely on the design of the tomb or structure. While Prufer goes into further depth on comparing tombs seen at Hopewell mounds in comparison to those classified as Adena, it still lacks the depth on variation of the log tomb itself. This is often problematic due to its simplistic nature, generalizing all log tombs into one or a few categories.

As demonstrated in Prufer's research (1961), log tombs have been a mainstay in consideration of the relationship between Adena and Hopewell societies. Log tombs have generally been considered diagnostic of the Adena (Webb and Snow 1945). The distinction between Adena and Hopewell is clear within the Scioto Valley (Greber 2005), but only Adena is seen to extend throughout the Eastern Woodlands as does the presence of log tombs (Dragoo 1963; Webb and Snow 1945). For the purposes of this research, I intend to analyze sites and log tombs in more general terms, categorizing them all as Early and Middle Woodland, given the complexity of the practice's distribution and its connection to the Adena-Hopewell dichotomy.

The above examples of archaeologists' attempts to develop typologies for log tombs demonstrate that this topic has rarely been cross-referenced with other log tomb typologies or categorizations. Additionally, they all fall short of utilizing a single variable to develop such a typology. For the purposes of my research, I will create a new typology for log tombs. By

collecting data on their practice and construction across 185 tombs and 22 Woodland period mounds, I will be able to determine which variables are readily available in scholarly sources and is significant across sites. Considering the developmental history of the log tomb in this way will emphasize the cultural complexity of the Eastern Woodlands during the Early and Middle Woodland period and possibly help to enhance discussion of the Adena and Hopewell distinction and the role of leadership in the society.

Methodology

In order to study the construction and use of logs tombs, I relied on archaeological reports, publications, and archival materials housed at the Ohio History Connection in Columbus, Ohio and The William Webb Museum of Anthropology in Lexington, Kentucky. In particular, the publications *The Adena People* (Webb and Snow 1945), *Mounds for the Dead* (Dragoo 1963), and "Excavation of the Coon Mound and an Analysis of the Adena Culture" (Greenman 1932) were crucial in the beginning stages of research as each contained a condensed list of excavated burial mounds by diagnostic characteristics, including the presence of one or more log tombs.

Using these data, I compiled a spreadsheet of sites containing a log tomb and then worked back through original or earlier publications to accumulate more precise data on each site. For sites that had less information available, I was able to use original field notes, excavation data forms, sketches, and photographs held at the Ohio History Connection and The William Webb Museum of Anthropology to build on past publications. The compiled spreadsheet included information such as mound name, site number, county, state, number of log tombs, year of excavation, excavator, site date, place of collections, and references (see Appendix B).

From the original spreadsheet, I created a separate table for the specifics of log tomb construction (see Appendix D). In order to optimize the comparative analysis between tombs and sites, I narrowed down my original spreadsheet of 69 sites to those that had the most description available on the layout of the tomb and mortuary evidence. This approach allowed for a full evaluation of the variation in log tomb construction within and between each site. Rather than laying out by archaeological site, the second table listed each tomb from the selected sites as most sites contained more than one log tomb. The aspects I focused on for the tombs included construction materials, orientation of the tomb's logs, size (length, width, and/or height), tomb

shape as designated by the author, tomb placement within the mound, covering or roof, flooring, and demographics of the buried individual(s). The archival research was crucial for this stage of the project, as original field notes, burial data forms, and feature forms filled in missing information from archaeological reports and publications on these aspects of the tombs. Using this table, I was able to determine which data were most available for each tomb and build a new log tomb typology.

Data and Analysis

The simple definition of a log tomb is a grave built of logs. However, this simple definition obscures the complexity and variation among log tombs, overlooking their construction and design. In order to better understand the variability of this Early and Middle Woodland burial practice, I compiled all sites containing a log tomb. Relying on available information on Adena and Hopewell burials, namely archaeology publications and field reports, I was able to collate a list of 74 sites. I also completed research stints at both the Ohio History Connection in Columbus, Ohio and the William S. Webb Museum in Lexington, Kentucky, to collect additional information from original field notes, hand-drawn sketches, and other archival materials. Log tomb sites had varying amounts of information available concerning their basic site and excavation information, and even more sparse information on the specifics of the burials or log tombs.

Archaeologists have attempted to develop different definitions of log tombs to properly classify and contextualize them. Greenman defined log tombs in a way that is generally accepted by the archaeological community, that a log tomb is a burial practice in which four logs are placed in a parallelogram about an inhumation (Greenman 1932). Don Dragoo, in his report of excavations at Cresap Mound, further defined such tombs as "either below or above the mound floor in which there was extensive use of large logs to form a crib or structure around the burial" (Dragoo 1963:185). However, a thorough investigation of the site reports containing log tombs points to variation well beyond what is captured in this definition. Even if the majority of log tombs fit within the definition offered by Dragoo, its over-simplification obscures important variation of this practice. Diversity among log tombs can be found in many aspects such as the number of individuals buried in the tomb, the demographics of those individuals, the materials used in construction, and the design of the tomb. When it comes to the individuals, tombs can

contain anywhere from one to six individuals and these burials can be cremations, inhumations, or fragmentary burials. The materials used can include only logs or can expand to different types of clay, bark, ochre, branches and brush, or more.

In the past, archaeologists have relied on trait lists as a means of organizing all the data of each excavation (e.g. Dragoo 1963; Webb and Snow 1945). In doing so, they developed specific categorizations of traits with log tomb almost ubiquitously being included. In some cases (e.g. Greenman 1932) log tombs constituted only one general category. In others (e.g. Mills 1907; Webb and Snow 1945), the variations among tombs were recognized and offered as specific traits that they considered significant. An example of this can be found in *The Adena People*, where Webb and Snow designated 17 tomb traits, 9 of which are categories specific to log tombs and the remaining are traits that can be present in log tombs or other types of tombs such as the presence of post-molds or head and foot rests. In different publications and excavations conducted by Webb, he attempted to categorize log tombs relative to each mound rather than comparing log tombs across the region (e.g. Webb 1940; Webb and Elliot 1942). While categorizing traits is necessary for a statistical understanding, it is problematic in that it simplifies the intricacy of the individual tombs and draws attention away from their complexity. While I will create categories for my analysis, I hope that the focus on log tombs and further comparative analysis will help prevent simplifying this practice and its implications regarding the Adena and Hopewell people groups.

From the original list of 74 sites with known log tombs, I focus here on a sample of 22 mounds containing 185 log tombs (see Appendix B, C, and D). My analysis was narrowed to these sites because of the breadth of information available for each site. Specifically, publications and archival resources for these 22 mounds went into further depth on individual burials or the author used their own typology for the tombs. Using this list, I was able to parse out important aspects of

the tombs, including construction materials, tomb shape and size, position within the mound, information about its base and covering, and any information on interred individual(s). These components of the tomb ultimately assisted in my construction of a log tomb typology that can be applied across sites.

In this chapter, I will first lay out the different variables seen in log tombs that were not included in my typology found below. These variables consist of the base of the tomb, covering of the tomb and burial, presence of post-molds, tomb size, burial demographics, and presence of artifacts. These aspects are included because they are important for understanding ways that the tombs vary beyond the typology laid out. Similarly, they add to our understanding of the log tomb and their role as an Eastern Woodland mortuary practice. The analysis of these variables is based on the information available in archaeological sources. It is important to note that the absence of data, likely due to material decay or lack of recording, does not mean that certain traits were not present in a tomb. This is important for understanding commonalities among tombs and will be referred to for different variables of my analysis. Then I will discuss the typologies defined through the analysis of the 185 tombs. I will end the chapter with the available dates of the selected mounds, regionality of the tombs, and bring Woodland cultural systematics back into conversation.

Base of the Tomb

An important aspect to the log tomb is its preparation prior to the tombs' construction and the placement of the burial. Out of the 185 tombs sampled, there was varying information available on the tomb's floor. The flooring group I designated to each tomb was based on the information on that specific tomb, general statements written in the conclusions of archaeological publications,

or inferences drawn from other tombs within the same mound. However, some tombs did not have enough available information to obtain a clear understanding of floor construction.

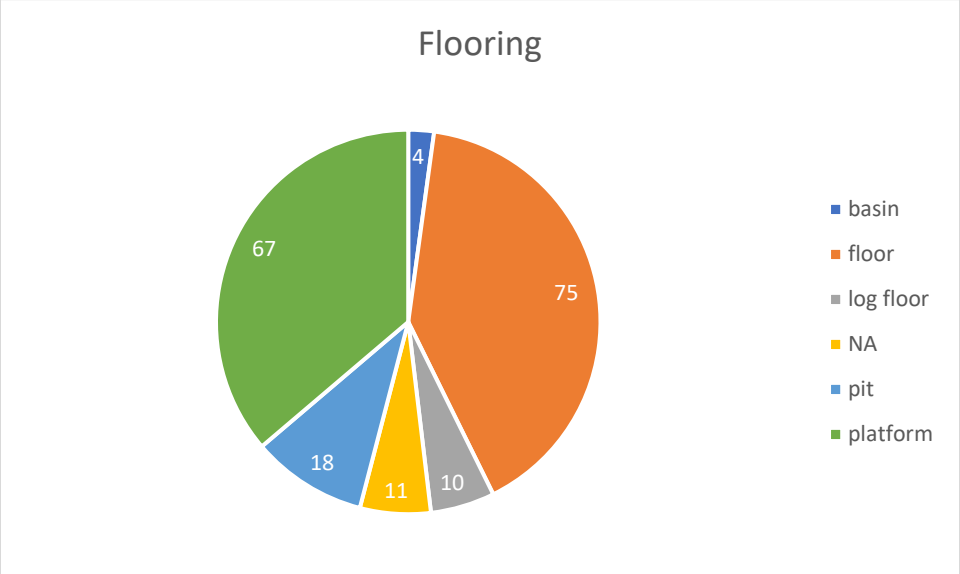

Figure 1: Flooring groups in log tombs

The most common of the groups was a prepared or unprepared floor, seen in 40.5% of the tombs (n= 75). The distinction between a prepared and unprepared floor hinges on, correspondingly, if the tomb is prepared its own floor, typically of clay layered with bark, or if the tomb is placed directly on the mound floor or within the mound without further preparation below the burial. Sometimes the prepared tomb floor included materials other than clay, such as gravel or earth. Earth in this context refers to soil, either from a local or nonlocal source determined by the proportion of sand, silt, or clay in the soil.

While a clay floor was the most common form of preparation, other tombs had preparations such as platforms, basins, or log floors. Still other tombs were placed within a pit. The platform was the second most common flooring, being present in roughly 36% of cases (n= 67). Platforms were constructed of either clay or earth. Some publications mark this distinction, but many simply write that the tomb was placed on a platform. Approximately 10% (n= 18) can be characterized as

a pit tomb or were placed at the base of a pit. 15 of these tombs were classified as pit tombs, a case where a circular or rectangular pit was dug and then lined with logs, typically to the edge of the pit. The other 3 were either simple or layered tombs placed at the base of a pit, typically dug into the mound floor. Another rare flooring was the log floor or log platform. This type was only seen in about 5.4% of the tombs (n= 10). In addition to the logs used to construct a tomb about the burial(s), the tombs included a floor lined with logs covering the entire floor beneath the individual(s). The final category is the clay basin which is only present in 2.2% of tombs (n= 4).

A wide variation of materials was used for the log tombs' floors, but there are also common materials grouped for a tomb floor's preparation across log tombs and mounds. As explained above, an unprepared or prepared floor was the most prevalent among log tombs. It is difficult to determine the number of floors that were prepared versus unprepared given the lack of description provided for the tomb floor. Yet out of the list of 185 tombs, 30.3% (n= 56) were confirmed to use clay while 9.7% (n= 18) used none. The 30.3% containing clay are not just specific to floors but also are seen in some of the platforms, basins, and pits. Still 60% of the tombs (n= 111) do not have enough information to know if clay was used in the construction of the tomb floor. Based on the data available, it can be deduced that more of the sites would have clay utilized in the floor. It is important to note, while clay seems to be a common occurrence, the type of clay varies. One category of clay seen is clay that requires preparation, most notably plastic clay and puddled clay. The other types of clay are naturally occurring, those noted in records include red clay, yellow clay, white clay, gray clay, and blue clay. Gravel was another material used, seen in six tombs. Three of these are said to be in combination with clay for constructing a floor, pit, and platform. The other three are solely gravel seen also in a floor, pit, and platform. There is an absence of gravel in 92.4% of tombs (n= 73 out of 79), leaving the presence of gravel to be rare.

Bark lining, specifically for tomb floors, has been designated as a common trait of log tombs (Webb and Snow 1945:44). Based on the data collected, this is confirmed for 36.2% of tombs (n= 67) that contain bark compared to only 9.2% (n= 17) without bark. While this is only a portion of the sample, many publications do not specify if bark was used. Additionally, bark was not always well preserved, as some archaeologists state that the bark was only distinguishable because the tomb or a portion of it was burnt (Webb 1940). This could mean that the original construction of a tomb included bark, but it deteriorated to the point of being unnoticeable or unverifiable in the tomb at the time of excavation. Another material for the base that was noted was logs, typically for a log floor. Tombs that included a log floor made up 5.4% (n= 10), while 82.2% (n= 152) definitively had no logs on the floor of the tomb. Other materials included brush, grass, reed grass, ash, charcoal, ochre, fabric, sand, earth, organic material, vegetable matter, and limestone.

Tomb and Burial Covering

A log, bark, or fabric canopy covering is assumed to be the typical roof of log tombs and it is largely accepted that the tombs were covered in some manner. Webb and Snow (1945:18, 48-52) support this in their trait list, with four traits related specifically to the tomb roof (33, 39, 40, 41) and one indirectly related (34). However, because log tombs are within a mound, or even enclosed with a primary mound themselves, the weight of the earth puts much strain on the roof, often causing them to collapse (e.g. Mills 1917; Webb and Elliot 1942). This is evident in some of the tombs with the parabolic curve seen in the soil around or in the tomb. Yet, in other log tombs, the deterioration of the wood and bark over time make it difficult to determine if a roof was actually present at the time of the tomb's construction. This is explained in detail by Webb and Snow:

> …early decay, and excessive weight of the earth caused the roofs to collapse into the tomb. The fallen logs soon decayed completely, and as centuries passed, evidence of the roof as such gradually disappeared. The collapse usually destroyed any possibility of molds being formed by the roof logs… Evidence for believing in tomb roofs comes therefore, mostly from observations on the tilting and faulting of earth lenses above the tomb floors [Webb and Snow 1945:48]

For this reason, even experienced archaeologists can miss evidence for a tomb roof as the log molds rarely are preserved. As a result, archaeological reports and sources often do not include very detailed information on the roof of the tomb, if any. The roof of the tomb is generally a structure or covering placed at the top of the tomb. This is distinguished from a burial covering which is when the buried individual is covered in some way. Out of the 185 log tombs, 18.4% of the tombs (n= 34) have information of the burial covering and, separately, 36.8% of the tombs (n= 68) explained the details of the roof covering the tomb.

The roofs of log tombs are more documented than the burial coverings and have less variability in the use of materials. There are a percentage of 36.8% log tombs (n= 68) that describe the roof of the tomb. Log roofs are the most common with 82.4% of tombs (n= 56 out of 68) including logs for the roof. Bark is also a common material as it is used in 58.8% of the log tombs (n= 40). This suggests that many more tombs likely used logs and bark for a tomb roof but due to the weakening of roofs with the weight of the mound and their eventual collapse or complete deterioration, it is not as well documented or identifiable. Brush and reed grass are seen in combination with a log roof each at one log tomb. Clay is present in three tombs, across two sites. At the C&O Mound (15Jo9) and Dover Mound, there is each a log tomb that is covered with a clay dome. This is distinguished from a primary mound based on the type of clay (gray and white), and

at C&O Mound the dome is then covered with a bark layer and more logs. The log tombs at Wright Mound are mostly covered with bark but one of them is described to cover the bark with puddled clay. The final material used in log tombs is seen at Seip Mound where a large stone is placed over the tomb. Seip Mound is one of the few sites to use stones in the construction of the log tomb or as a form of support and the only site to have stone for the roof of the 68 tombs described.

Similar to most aspects of the log tomb, the covering of the body within the tomb relied on a wide variety of materials. The most common body covering was the use of bark, seen in 70.6% of the log tombs with burial covering details (n= 24 out of 34). Due to bark not preserving well in the archaeological record and the presence of bark in around two-thirds of the tombs supports that more of the tombs would have bark overlaying the buried individual. Certain log tombs were said to use fill material, meaning that earth or clay are piled over the body, most of which are filled to the top of the tomb. 8.8% of tombs (n= 3 out of 34) use an earth fill, one specified as a sandy loam and another as a loam fill. This implies the use of earth as a tomb-filling was a rare occurrence. However, 4.1% of the tombs (n= 14 out of 34) use clay over the body, 6 of which are identified as puddled clay. While some of these log tombs are filled to the top of the tomb with clay, many only have a layer of clay covering the burial. Given that many tombs are noted to have a caved in roof, it would suggest that it is less common for a tomb to be completely filled. The remaining materials used to cover interred individuals include brush, a woven mat, and fabric. Brush and the mat of woven bast fibers are only seen in one tomb but a shroud or woven fabric is found in four tombs. Fabric is less likely to preserve well therefore it is possible that it would have been present at more sites than was documented. Many tombs have a combination of these materials and it is common for tombs with clay to also have bark. Seip Mound is one example in which multiple materials are used for covering the burial:

> The majority of burials were covered with a thin layer of disintegrated bark. It is impossible to be certain in all cases whether the bark was actually intended as a covering for the cremated bones or whether it was the remains of a bark roof over the log crib… All burial platforms…had their own individual primary mounds… Some were made of fine, others of coarse gravel, and several contained one or two strata of sand [Shetrone and Greenman 1931:482]

Presence of Post-Molds

Post-mold is a term used to refer to the remaining evidence of posts, typically wood, indicated during an archaeological excavation by a difference in soil. Post-molds in log tombs are fairly common and documented by archaeologists. Publications largely attribute the presence of post-molds in log tombs to the following reasons. The first is that the vertically placed logs were used as support beams for keeping the log tomb in place and serving as structural support (e.g. Shetrone 1926). The second is related to the discussion on the roof or covering of the tomb (e.g. Webb 1940). A third idea not as commonly held was suggested by Prufer who explained that post-holes "have been interpreted as evidence for trophy posts" (Prufer 1961). This idea was raised by Webb and Snow as well explaining it as a post "upon which hung the trophies, clothing, and other property of the deceased which might have been displayed at the grave," but this trait was still less so emphasized (Webb and Snow 1945:49). The majority of reports that include information on post-molds suggest that they are present for at least one of the first two reasons listed above, upholding a roof or structural support.

In *The Adena People*, Webb and Snow (1945:47) include post-molds as an important trait characteristic as it is used to define two tomb traits. Trait 30 is described as "Vertical tomb-posts

in corners of rectangle horizontal pattern." In this description, they attribute the presence of post-molds to structural support. One archaeological report they reference Shetrone's excavation of the Hopewell Mound Group. In it he explains a tomb in Mound 25 where "At each corner there had been set a post for support of the structure, while exteriorly there had been driven stakes to hold the three tiers of logs in place" (Shetrone 1926:67).

The second time that post-molds are explained is for trait 34, specifically "vertical post-molds at grave" (Webb and Snow 1945:49). This differs from trait 30 because rather than the posts only being in the corners, they are irregularly placed about the grave. It is worth mentioning that while trait 30 is specific to log tombs, trait 34 is applicable to log tombs and other grave types seen in the Early and Middle Woodland Periods, such as stone graves. Unlike trait 30, in trait 34 "[the post-molds'] purpose is not certainly known, but they suggest that they may have served to support a light canopy, or some kind of a temporary structure erected at the grave" (Webb and Snow 1945:49). This supports the second hypothesis which is raised in many reports.

In the sample of 185 tombs, 68.1% (n= 126) give sufficient information to know or infer if post-molds were present in a tomb. Of the 126, 79.4% (n= 100) do not include post-molds and 20.6% (n= 26) do have vertical posts present. Given the amount of analysis dedicated to post-molds, specifically their designation as traits by Webb and Snow, it is surprising how few, only 20%, have an indication of post-molds present. This is another aspect of tombs that it is important to recognize in which a lack of recording does not necessarily mean that post-molds were not present, as they do not preserve as well and are harder to identify.

There are eight mounds in which at least one tomb includes post-molds. Three of these suggest that the vertical posts were in place to support a roof over the tomb, seen at Coon Mound, Crigler Mound, and Wright Mound. Four of the mounds support the other hypothesis that the posts

were used for structural support, including Overly Mound, Caldwell Mound, Seip Mound, and Hopewell Mound 25. Mound 7 at Mound City is one of the only in which post-molds are present but not for either of the proceeding purposes as it describes "a platform to be surrounded by a circle of post molds about 11 ft. in diameter" (Brown 2012:76). This instance is rare and not described in any of the other 185 tombs analyzed. Overall, the presence of post-molds is largely attributed to either supporting a roof or the structure of the tomb and is most likely present in more tombs than is documented.

Log Tomb Size

The way in which authors chose to describe the log tomb size varies significantly. Some include enough information to determine the volume of the tomb while others only give a visual description or the height. The area of log tombs was most available across reports and is what I choose to focus on for analyzing the size of log tombs. There were 44.3% of tombs (n= 82) that either provided the length and width to calculate the area or had the area specifically. The distribution of area is quite large with the smallest log tomb measuring to 3 square feet and the largest at 255 square feet. While the square footage of log tombs could be very large, the vast majority measured to 50 square feet or less (see Figure 2). The size of the tomb typically corresponds with the number of interred individuals and if the individual was cremated or inhumed, which is explained further in the following section.

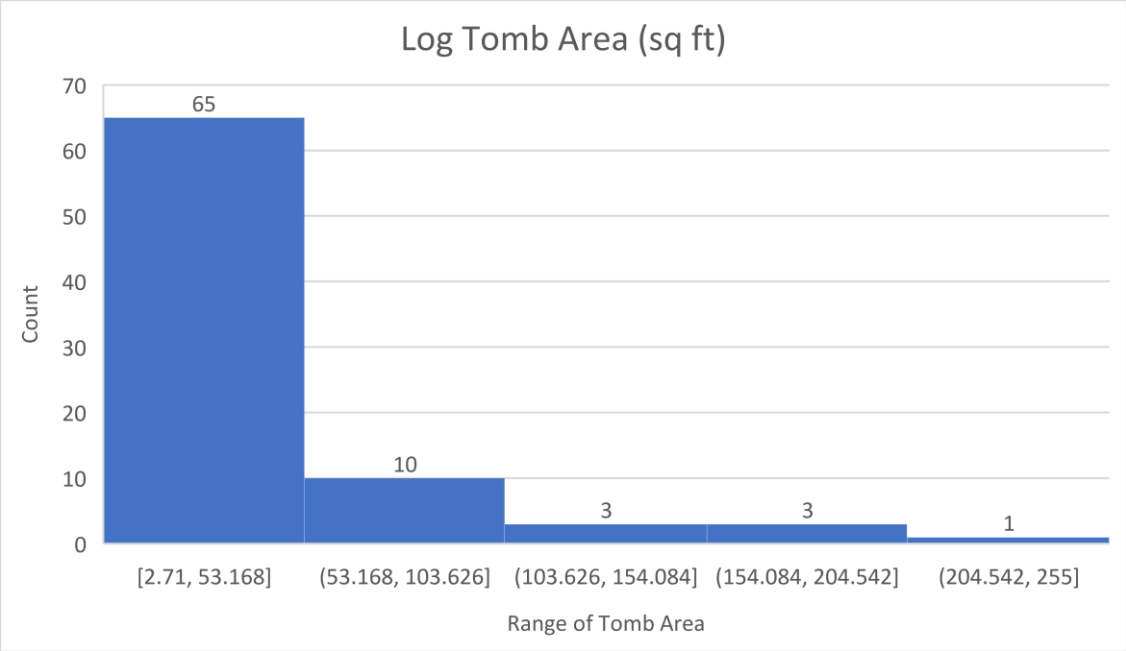

Figure 2: Graph of Log Tomb Area Distribution

Burial Demographics

The available information on burial demographics varies widely based on what the author chose to include and the time in which the excavation was conducted. Case attempts to reconstruct the reliability of Hopewell burial information, as he states:

> Comparison of age and sex studies of Ohio Hopewell skeletons made by so many different investigators over such a long period of time is challenging because of a lack of information about which specific techniques were used by a researcher to make age and sex assessments on particular skeletons. This leads to uncertainty about the level of accuracy and the comparability of specific determinations [Case 2008:466-467]

While Case speaks specifically of Hopewell burial demographics, the same can be said for Adena burials. It is important to keep this in mind when considering the three main components I choose to analyze for the demographics of the log tomb burials: the preparation of the burial (cremation or inhumation), the number of individuals in a tomb, and the age and sex of individuals interred.

The majority of the tombs had information on whether the burials within the log tombs were a cremation, inhumation, or both. Out of the 185 tombs analyzed, 87% (n= 161) of them had the specifics of the interred individual's burial preparation. Inhumation was the most common mode of burial seen in log tombs, present in 54.7% of tombs (n= 88 out of 161). Cremation follows close behind this with 41% of tombs (n= 66 out of 161) having one or more individuals cremated. Only 4.3% of tombs (n= 7 out of 161) with multiple individuals had varying preparation for the individuals within the tomb. All 7 of these tombs contained at least one cremation and one inhumation.

For the number of individuals in the tomb, I focused on whether the tomb had a single individual, multiple individuals, or contained no remains. Many of the sources, 89.2% (n= 165), included how many individuals were buried in a tomb. The majority, 68.5% of the tombs (n= 113 out of 165), contained a single individual. One problem encountered in this analysis was that some publications specify that the burial was a cremation but do not indicate if the cremation is the remains of one or more people. However, it was common that reports would only specify if a cremation was more than one individual. With this being the case, it was assumed that any unspecified cremations were the remains of a single individual and counted as such. Another important issue to note is that while most of the tombs only had one interred individual, some tombs appeared to be constructed for more than one individual based on the size or positioning of the remains. Generally, this is not the case, but some examples can be found in the 185 tombs

analyzed, such as Feature 8 of the Wright Mound: “It appears that the burial area, which was the central rectangle inside the log platform, was 12 feet square and had evidently been designed to accommodate two bodies” (Webb 1940:24-25) (see Figure 3).

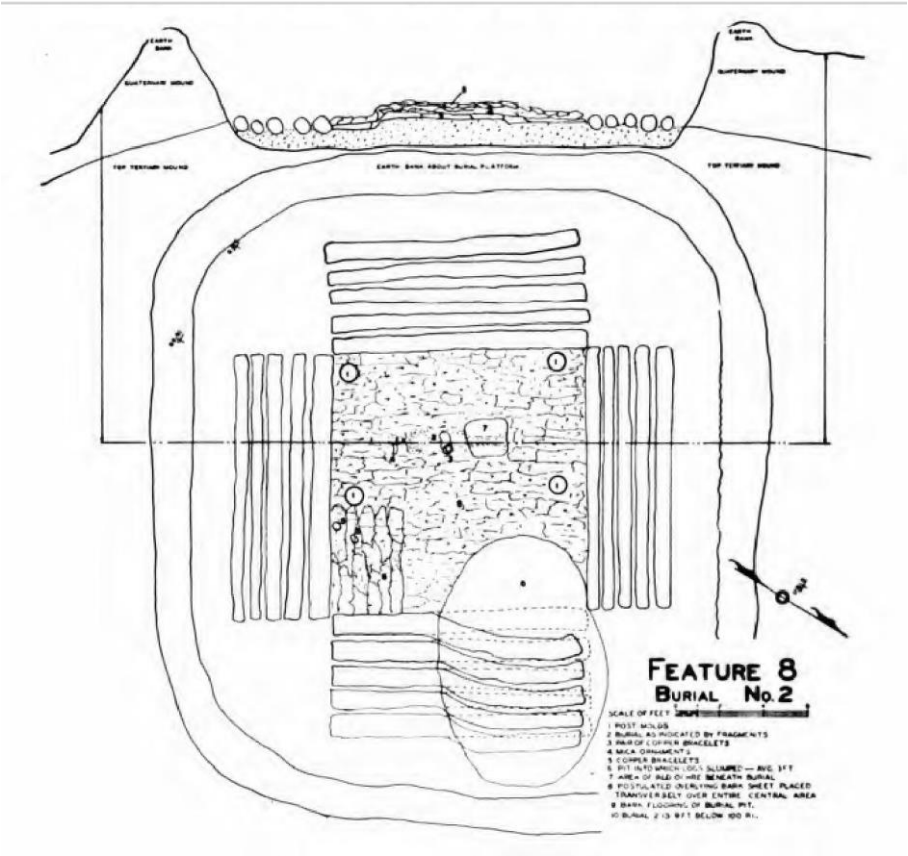

Figure 3: Example of a log tomb constructed for more than one individual, Wright Mound Feature 8, Burial Number 2 (Webb 1940)

A total of 29.7% of tombs (n= 49 out of 165) held multiple individuals, making up just over a third of the tombs with this information available. This left only three tombs in which there were no remains present, seen in feature 5 of the C&O Mound (15Jo9), tomb 9 of West Mound, and burial 68 of Seip Mound. Both publications for Seip and West Mound do not go into detail about why these tombs may have no human remains or confirm why they still consider these to be tombs despite having no remains present. However, Webb and Haag speculate that feature 5 of the C&O

Mound had at one time included remains but it was evident that a pit had been dug into the mound, intruding the burial (Webb and Haag 1942:318).

The final aspect of burial demographics I analyzed was sex and age, specifically the distinction between adult, child, and infant. This information was especially sparse as identification between male and female remains was less precise at the time of excavation and some publications did not include such information. This component of the burials I calculated by individual rather than by tomb. There were 95 individuals with information on their sex and or age. Given that it is harder to identify the sex of a child or infant, I did not distinguish their sex and kept this as a separate category from male and female. This means that the count for both male and female assume that the individual was an adult, which is typically specified in the reports. The majority of individuals, 54.7% (n= 52 out of 95), were male. Females were nearly half of that count, reaching a total of 24.2% (n= 23 out of 95) adult females. Child and infant numbers were much less, as only 13.7% were children (n= 13 out of 95) and 7.4% were infants (n= 7 out of 95). It is important to recognize that these numbers do not indicate that the individual was buried alone. Many males shared a grave with others and several of the children and infants had an individual tomb.

To gain a better understanding of the burial demographics of individuals buried alone, I examined the individual inhumations. Due to publications often not specifying how many people were cremated or the sex of those cremated, the inhumations were a better indicator of this information. Nearly 36.8% (n= 68) of the tombs contained one inhumed individual. Out of this, 48.5% (n= 33 out of 68) did not specify the sex or age of the individual. The remaining 35 tombs with the burial demographics divide as follows: 57.1% male (n= 20 out of 35), 34.4% female (n=12 out of 35), 5.7% children (n=2 out of 35), and 2.8% infant (n=1 out of 35). This demonstrates that

individual burials were much more common in adults than children and infants, but not completely unheard of. Additionally, there were more males buried individually than females, however females still make up over a third of the individual burials.

Presence of Artifacts

The majority of publications and original field notes indicate the artifacts present in the log tomb. A total of 84.9% of log tombs (n= 157) include this information. While research into these artifacts and their association are certainly a worthwhile pursuit, doing so is beyond the scope of this thesis. However, a list of the artifacts present in each tomb is listed below (see Appendix D). It is worth noting that 87.3% (n= 137 out of 157) included artifacts, most of which included multiple artifacts, often about the body of the burial. Only 12.7% of the log tombs (n= 20 out of 157) were noted to have no artifacts. The density of log tombs containing artifacts adds further evidence that the people buried in log tombs held a significant role within society.

Typology

While the complexity and variation amongst tombs made it difficult to set specific categories, I was able to create a typology by focusing on the log tombs' form and design, specifically regarding the logs' function for the tomb. The information provided the most across sources was the use and arrangement of logs for the tomb and its construction. The accessibility of this information made it the most feasible for creating a typology that could apply across so many sites and a broad geographical area. While logs were occasionally used for the floor and roof in addition to the walls, I analyzed this as a separate category from the design as there was no correlation between the way the tomb was built and the inclusion or exclusion of a log floor or

roof. Additionally, not all authors specified the preparation that went into the floor or roof of the tombs. By comparing the design of the sampled 185 tombs, I was able to categorize them into five types: simple log tomb, layered log tomb, burial pit tomb (rectangular and circular), log platform tomb, and other. The chart below displays the number of log tombs that are categorized into each typology (see Figure 4).

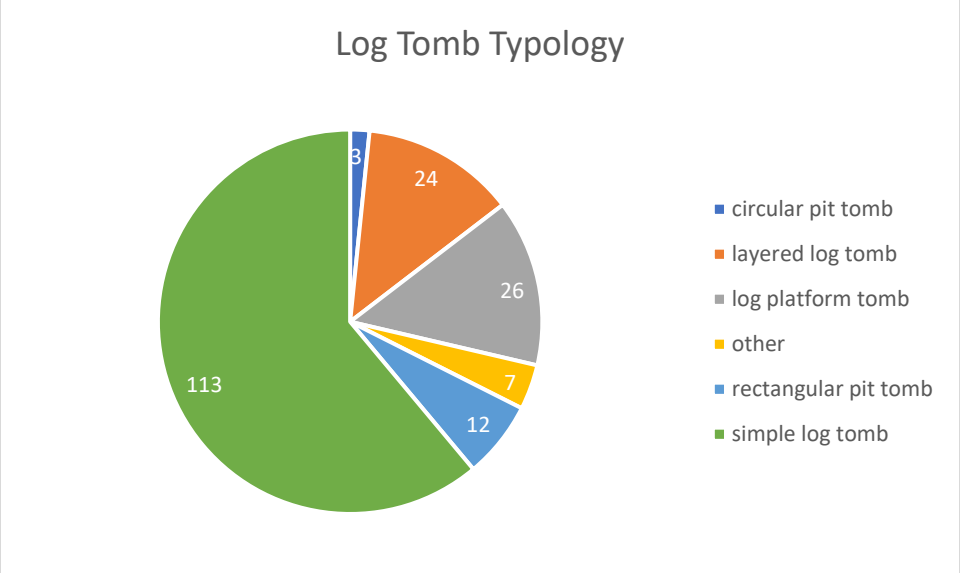

Figure 4: Log Tomb Typology

The first category, the *simple log tomb*, is the most common among the sample and demonstrated in 59.5% of tombs (n= 110) at 17 of the 22 mounds. This tomb type is constructed of four logs about the body or cremation, the height reaching the diameter of one log (see Figure 5).

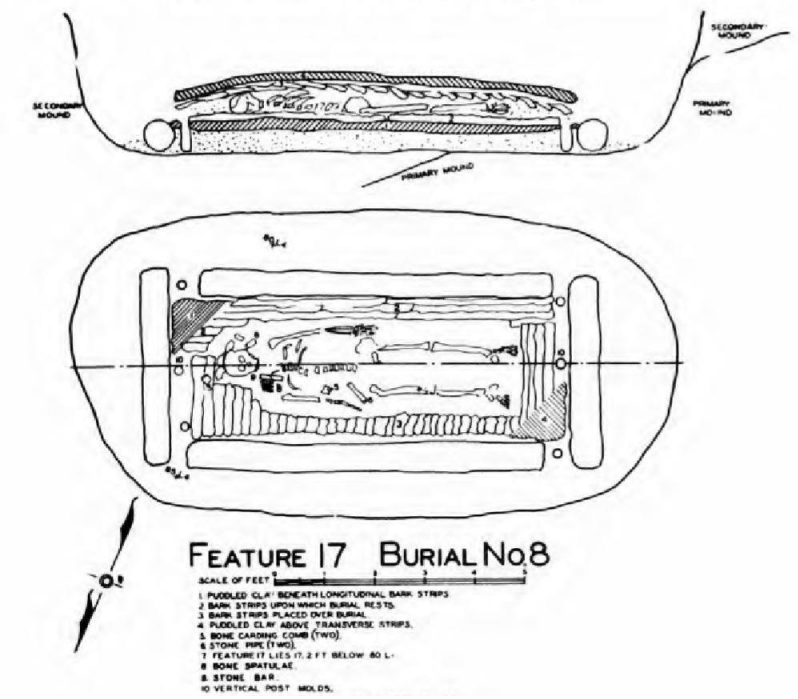

Figure 5: Example of the simple log tomb, Wright Mound Feature 17, Burial Number 8 (Webb 1940)

Typically, these tombs are rectangular, and in very few are all of the sides are of an equal length. Eleven tombs within this group were noted to be missing a log on at least one side of the tomb. These tombs were still categorized with the simple log tomb as it was unclear in the reports if the tombs were intentionally constructed this way or that if some of the walls did not preserve as well. Differences worth noting can be found at the C&O Mound (15Jo9), Wright Mound, and Metzger Mound. At the C&O site, Webb and Haag note in describing Feature 8, Burial 2 "that in selecting logs for this tomb, some were chosen which were not straight" (Webb and Haag 1942:322) (see Figure 6).

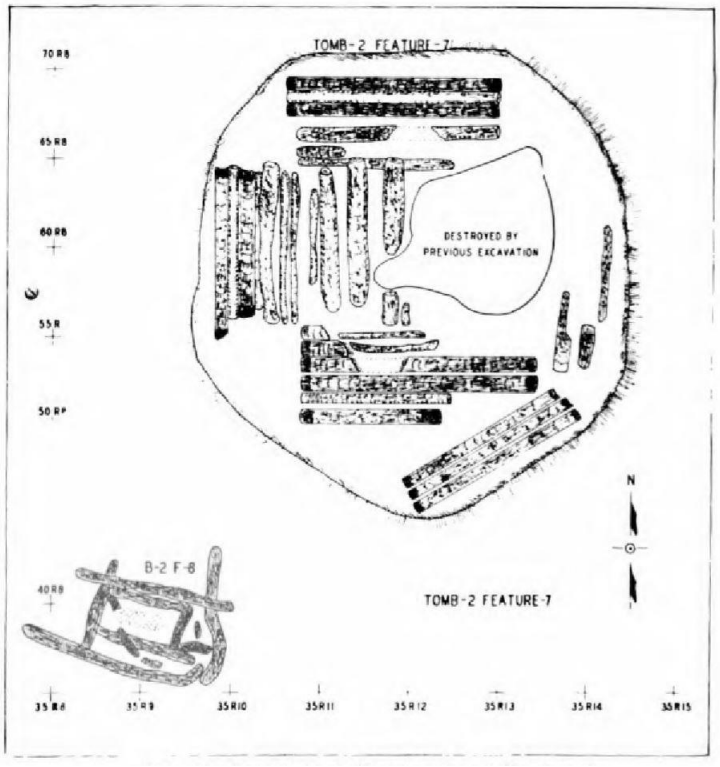

Figure 6: C&O Mound (15Jo9) Burial Number 2, Feature 8 (Webb, Haag, and Snow 1942)

One tomb was present at both Wright and Metzger mounds that followed the construction of a simple log tomb but were placed at the bottom of a pit rather than on the floor of the mound or at a certain level within the mound. As will be explained in further depth later, these are not considered a burial pit tomb because they are still constructed in the same manner as a simple log tomb.

The *layered log tomb* is similar in many respects to the simple log tomb but consists of logs being placed one above the other to create the tomb (see Figure 7). The shape corresponds to the simple log tomb but is at least two logs high rather than one.

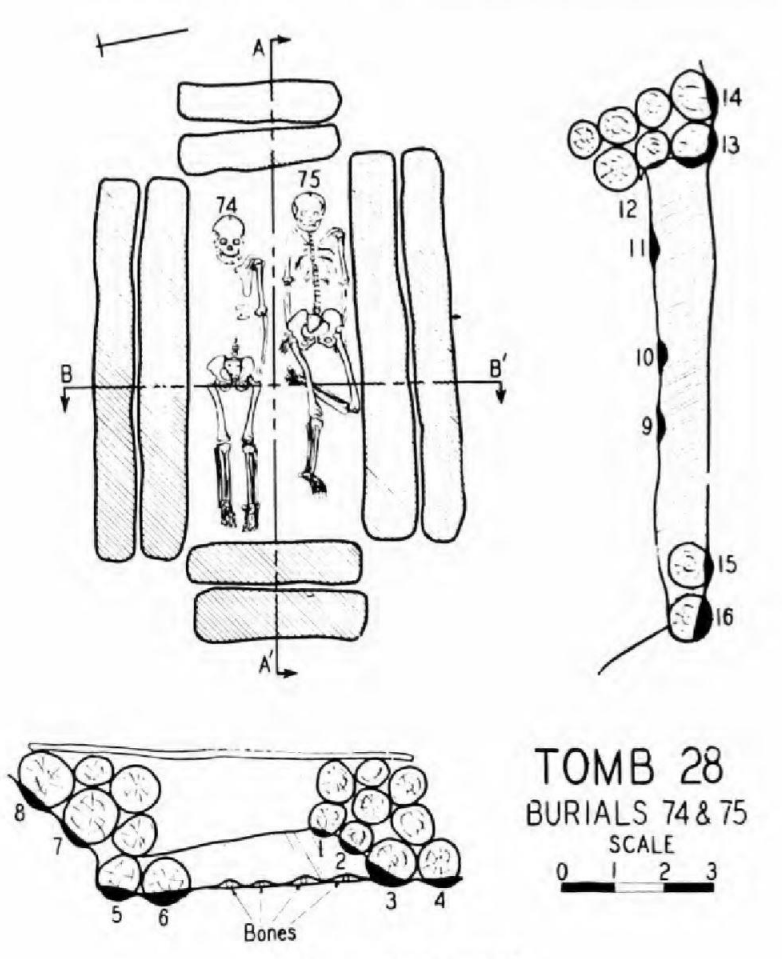

Figure 7: Example of a layered log tomb, Robbins Mound Tomb 28, Burial Numbers 74 and 75 (Webb and Elliot 1942)

A total of 11.9% of tombs (n= 22) fall within this category though they are only known from 6 of the 22 mounds: Adena Mound, Robbins Mound, Metzger Mound, Mound City Mound 7, Hopewell Mound Group Mound 25, and West Mound. Tombs grouped into this type had to have a total of two or more walls with stacked logs. While most of the tombs have a fairly standard design that fits with this definition, there is one deviation worth mentioning. In the Adena Mound, there are two tombs in which the tomb design follows that of the simple tomb, however then the walls running the length of the tomb are layered with smaller logs. The other layered tombs typically have similar sized logs layered upon one another for the construction of the tomb. While the two

seen in the Adena Mound are unique in this way, they were still considered a layered tomb because the tomb is more than one log high on two of its four walls.

The *log platform tomb* is the second most common form, making up 13.5% of tombs (n= 25). The log platform tomb follows the design of the simple log tomb but has multiple logs laid horizontally to one another about the body of the individual. The typical design has two logs on each side of the burial, creating a log platform of eight logs (see Figure 9).

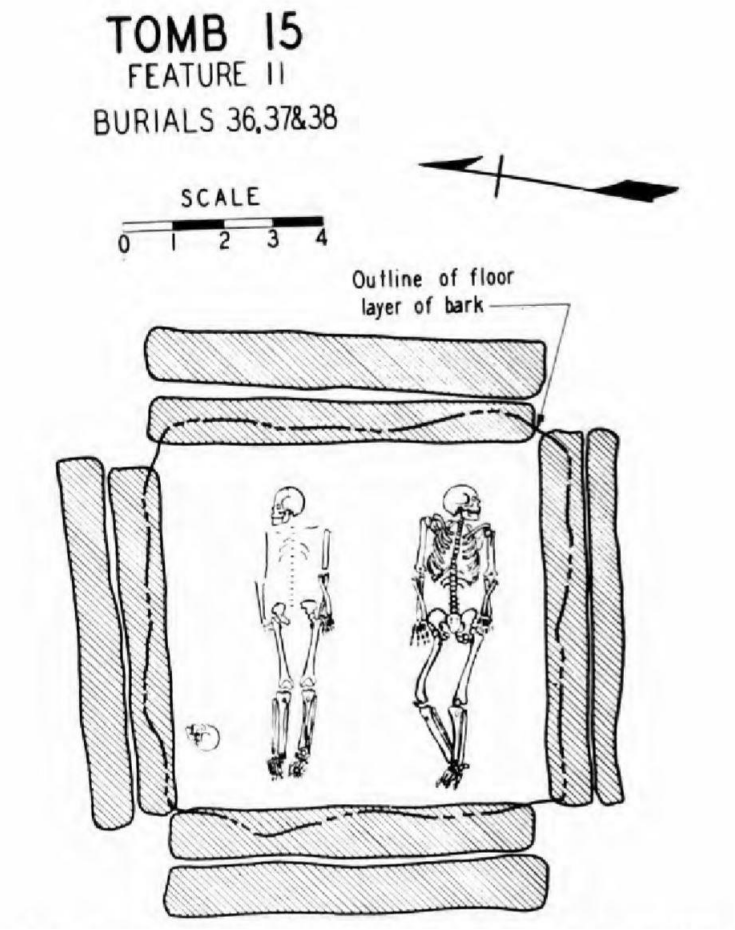

Figure 8: Example of a log platform burial, Robbins Mound Tomb 15, Feature 11, Burial Numbers 36, 37, and 38

(Webb and Elliot 1942)

However, there is a large variation in the number of logs used for log tombs and for this reason I defined this type more broadly as any log tomb with two or more sides containing more than one

log laid parallel. The tombs at the Robbins Mound are particularly unique in that many of them have an irregular number of logs on each side of the tomb. Very few within the mound are as depicted in Figure 9 but have a different number of logs placed on each side of the burial (Webb and Elliot 1942:414-415). It is important to note that the log platform tomb is a separate distinction from tombs containing a log floor. When considering the logs in a platform, I only take into account those logs that surround the burial, whereas with a log floor I consider all of the logs on which the burial is placed. Despite the density of tombs classified as a log platform tomb, it is only seen in five mounds: Toepfner Mound, Wright Mound, C&O Mound (15Jo9), Robbins Mound, and Seip Mound.

The *burial pit log tomb* falls close behind the layered tomb as 8.6% of the tombs (n= 16) are classified in this category. This burial type is more complex in that it requires more labor and preparation. This tomb type is defined by its initial preparation of a dugout pit, typically below the floor of the mound; however, at some sites, the pit is an intrusion into the surface of a mound. Some of the layered tombs had an earthen wall built up prior to placing the logs as a means of holding the logs in place. This is distinguished from the pit tomb because rather than having built up earth, the pit tomb is dug into earth. The pit tomb can be further separated into circular pit tombs (see Figure 9) and rectangular pit tombs (see Figure 10). The difference between these groups is simply the shape of the pit dug and the way that the logs were lined in the pit to follow that shape. The circular pit tomb is much less common as it is only seen in three tombs. However, each of these are from a different mound: Wright Mound, C&O Mound (15Jo2), and Cresap Mound.

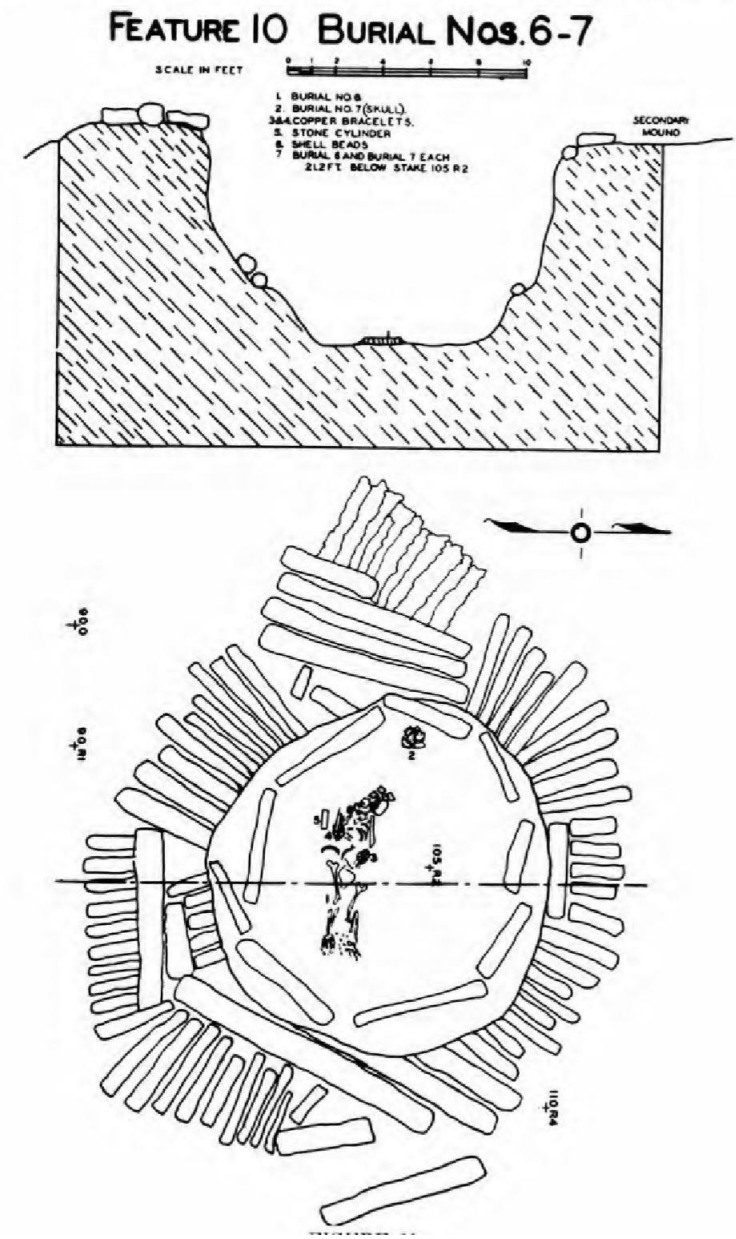

Figure 9: Example of the Circular Pit Tomb, Wright Mound Feature 10, Burial Numbers 6 and 7 (Webb 1940)

The rectangular pit tomb, on the other hand, is characteristic of 13 tombs. These are seen across seven sites: Toepfner Mound, Wright Mound, C&O Mound (15Jo9), Cresap Mound, Ricketts Mound, Mound City Mound 7, and West Mound.

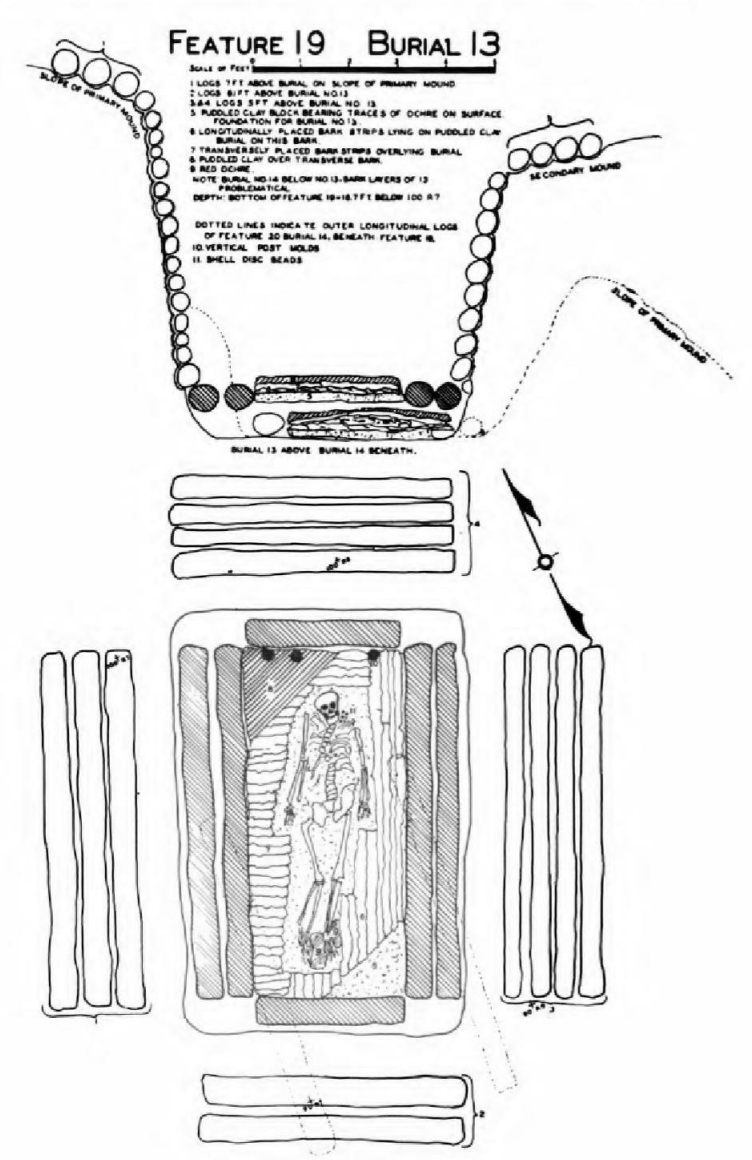

Figure 10: Example of a rectangular pit tomb, Wright Mound Feature 19, Burial 13

The final group is the *other* category which includes all tombs that are excluded from the typology and only have one instance of that tomb's design and construction. I identified 3.2% of the tombs (n= 6) as such anomalies. The first example is the log tomb in Coon Mound. This is the only log tomb at the site, and it was constructed in a rectangular pit. However, it is unique from the other rectangular pit tombs because the wall of the tomb was made by placing the logs in a vertical fashion (see Figure 11). Greenman describes the details of the tomb's construction and

design as follows: “At the bottom of the vertical walls of the tomb were 67 holes which were originally occupied by vertical posts…the builders must have dug out a trench about a foot wide around the base of the vertical walls, placed the posts in position and then filled around them” (Greenman 1932:380).

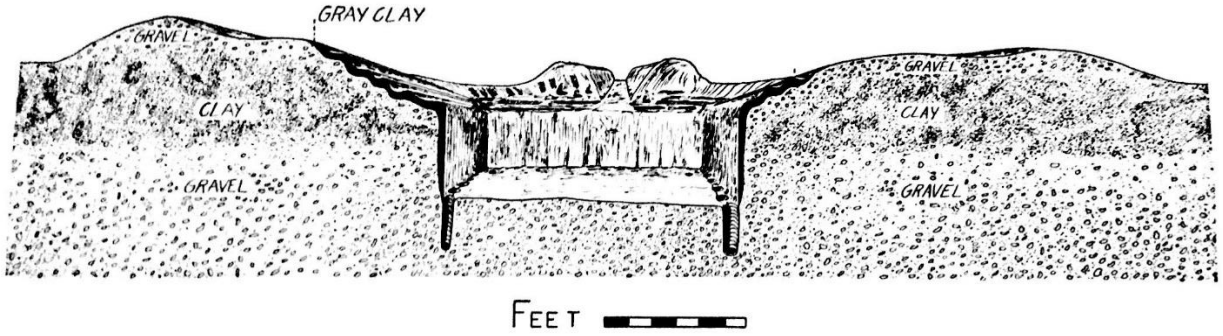

Figure 11: Log Tomb in Coon Mound (Greenman 1932)

This is the only tomb out of the 185 analyzed that was designed with vertical logs. As explained above, some tombs included post-molds that indicate either a roof support or wall support, yet the walls themselves were only horizontally lying logs.

Another unique tomb is found at the Adena Mound, the sepulcher of Burials 9 and 10. As explained by William Mills, the first archaeologist to excavate the Adena Mound, “The sides of this sepulcher were composed of large logs 15 and 16 inches respectively in diameter. These logs were placed near together at the head and extended at an angle of 35°…” (Mills 1902:466). The image below depicts the appearance of this tomb (see Figure 12).

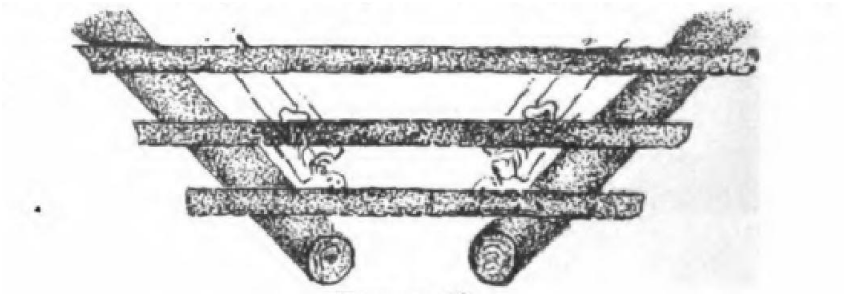

Figure 12: Adena Mound Burials 9 and 10 (Mills 1902)

The majority of the log tombs are parallelograms with the exception of the circular pit tombs. The tomb encasing burials 9 and 10 at the Adena Mound is one of the few instances in which the shape of the tomb is more of a triangular fashion.

While the tombs are still distinctive from one another, Seip Mound also contained a tomb that was described as being triangular. Limited information is given on the specifics of tomb design for the log tombs present in Seip Mound, but a small description is given about the tomb of Burial 91, "In six instances the remains of two cremated individuals were mingled together in the same pile. In one of these, Burial 91, the triangular platform was the smallest in the entire mound" (Shetrone and Greenman 1931:485). The other platforms described in this publication are rectangular and it can be assumed that the design of the tomb follows the shape of the platform on which it was constructed. With this in mind, this tomb must have been triangular but much smaller than the Adena Mound tomb given that it enclosed two cremations rather than inhumations.

A fourth example of an anomalous tomb can be seen at the C&O Mound (15Jo9). A fairly extensive description is given for the tomb of Burial 3: "At least five logs had been placed in terraced steps on the northeast side, five on the southeast side, and six logs in the northwest side of the tomb. Six logs had been laid parallel, northwest-southeast across the bottom of the tomb… The extended burial lay on top of the six-log platform forming the tomb bottom" (Webb and Haag 1942). The terrace design of this tomb is unlike any of the other 185 tombs.

The Caldwell tomb is also distinct from the other tombs. Similar to the Coon Mound, the tomb in the Caldwell Mound is the only tomb of that mound. The tomb seems to be a combination of two types, the log platform tomb and the layered log tomb. The tomb is described as "…two logs of estimated fourteen inches in diameter, side by side, sunk into the surface about three inches, with another log on top of the two. These logs did not overlap at the corners but just not on the inside of the corners" (Anonymous 1950:9). The presence of two horizontally laying logs on each side of the tomb could categorize it with the log platform tomb but the additional log on top could also classify this tomb as layered (see Figure 13). This is the only instance in which a log tomb is constructed in this manner.

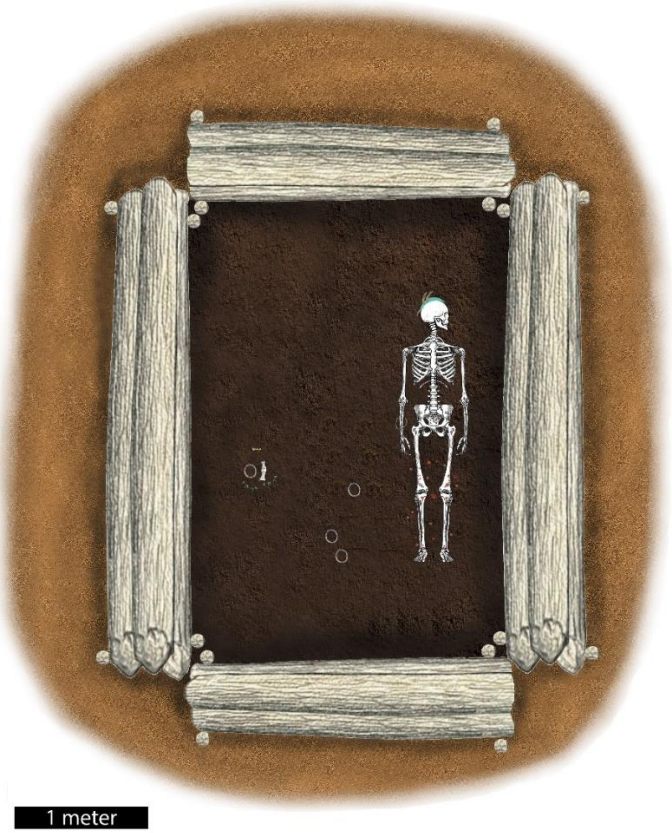

Figure 13: Log Tomb in Caldwell Mound (Everhart 2020)

The last of the other category is a tomb found in the Metzger Mound. In the last tomb described in the archaeology report of the Metzger Mound the "skeleton was immediately below a large log, the saplings and small logs constructing the pen had been planted in the earth around this skeleton, somewhat in the form of a tepee" (Fowke and Moorehead 1894:319-320). The logs in this tomb are not quite vertical as seen at Coon Mound, yet it is one of the only other instances in which the logs are not laid horizontally.

The typology laid out in this section demonstrates that some correlation can be found across log tomb design and construction. These types exemplify the complexity of the tombs given the amount of labor that was required to build log tombs and also the density at which they occur in the mounds. The log tomb typology is meant to lay a framework to build on our understanding of Early and Middle Woodland practices. While categorizing the tombs is important for conducting such an analysis, it must be noted that this burial practice has to be simplified in order to label them this way. The other aspects of the tomb discussed prior to the typology are just as important as the design for recognizing the intricacy of log tombs. For the remainder of the data and analysis, I will attempt to bring the typology in conversation with the mounds' regionality, site dates, and the Adena-Hopewell distinction (see Table 1; Appendix A and C).

Log Tomb Regionality

Early and Middle Woodland log tombs are found most densely in the greater Ohio River Valley area of the Eastern Woodlands. For the sake of analyzing log tomb regionality, utilizing river valleys provides the ability to investigate the spatiality of log tomb types in a manner that might most closely approximate the bounds of communities. The three categories I opted to divide the log tomb sites between are the Scioto River Valley, Licking River Valley, and Eastern Ohio

River Valley. The Scioto River Valley runs from Central to Southern Ohio. The Licking River Valley is located in Kentucky and runs southeast from the Ohio River Valley, branching off near Cincinnati. It is separate from the river valley near Newark, Ohio that shares its name. The last group, which I refer to as the Eastern Ohio River Valley, includes sites on the eastern side of the region near the Ohio and West Virginia border.

While the counties and states are available for almost all of the 74 sites that contain a log tomb, this analysis only focuses on the 22 mounds that were examined for the log tomb typology. Several of these tombs are located in the same county, reaching a total of nine counties. All of these counties are either in or very near to the river valleys. The table below lists the sites and their corresponding county, river valley, and log tomb types present at that site.

Site	County	River Valley	Log Tomb Types
Robbins Mound	Boone, KY	Licking	simple, layered, platform
Crigler Mound	Boone, KY	Licking	simple
C&O Mounds	Johnson, KY	Licking	simple, platform, pit, other
Dover Mound	Mason, KY	Licking	simple
Wright Mound	Montgomery, KY	Licking	simple, platform, pit
Ricketts Mound	Montgomery, KY	Licking	simple, pit
Toepfner Mound	Franklin, OH	Scioto	simple, platform, pit
West Mound	Highland, OH	Scioto	simple, layered, pit
Adena Mound	Ross, OH	Scioto	simple, layered, other
Caldwell Mound	Ross, OH	Scioto	other
Edwin Harness Mound	Ross, OH	Scioto	simple
Hopewell Mound Group	Ross, OH	Scioto	simple, layered
Metzger Mound	Ross, OH	Scioto	layered, other
Mound City	Ross, OH	Scioto	simple, layered, pit
Overly Mound	Ross, OH	Scioto	simple
Seip Mounds	Ross, OH	Scioto	simple, layered, platform, other
Coon Mound	Athens, OH	Eastern Ohio	other
Cresap Mound	Marshall, WV	Eastern Ohio	pit log tomb, other

Table 1: Regionality of Log Tombs by River Valley

Both the Scioto River Valley and Licking River Valley have all five of the log tomb types present in the region: simple log tomb, layered log tomb, log platform tomb, pit log tomb, and other. The Eastern Ohio River Valley, on the other hand, only contains the pit log tomb and other. However, the Eastern Ohio River Valley has only two sites from the sample of sites and there are many more mounds with log tombs in this region, spread further in West Virginia and also in Pennsylvania. Additionally, there are sites in Indiana and Illinois that are not considered in this analysis. Historically, Woodland period research and archaeology has heavily focused in the Scioto River Valley and also in Kentucky (Greenman 1932; Webb and Snow 1945). For this reason, these regions have more recording and reliable documentation on the log tombs present. Because of this, it is hard to determine whether the lack of log tomb variability in the Eastern Ohio River Valley can be attributed to a regional significance or simply lesser recording and research.

Site Dates

Of the 22 mounds focused on for log tombs, samples from 10 of them have been analyzed by ^{14}C dating. The table of dates (see Appendix A) includes all available dates applicable to the mounds. The diagrams below (see Figure 15) displays only the dates that have an uncertainty greater than 20 years. Radiocarbon dates of Adena and Hopewell sites have varying reliability as some were taken very early or the context of radiocarbon samples were not well documented (Greber 1983). That being said, the sites with the most dates taken give us the best indication of when the mound was constructed. For the purposes of my research, I am ranking the sites from earliest to latest based on the earliest date reported from the samples as some sites only have one or two available dates. While the sites are ranked from earliest to latest, some appear to be almost contemporaneous with only two clear outliers, one date from Cresap Mound and one from Harness

Mound (see Figure 14). Ranking them in this way allows for an analysis in relation to the log tomb typology laid out above.

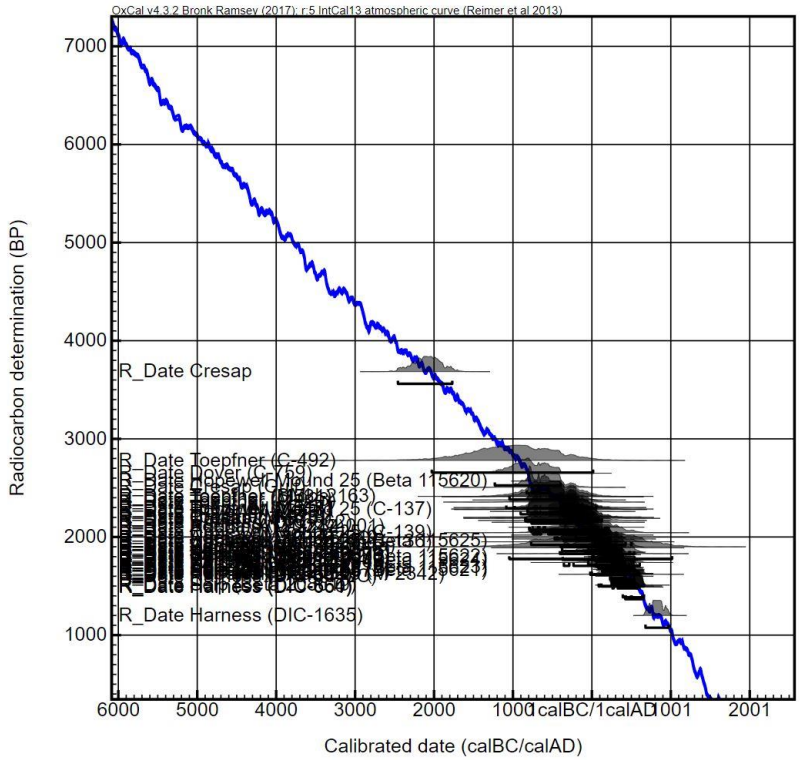

Figure 14: Curve Plot of Site Date

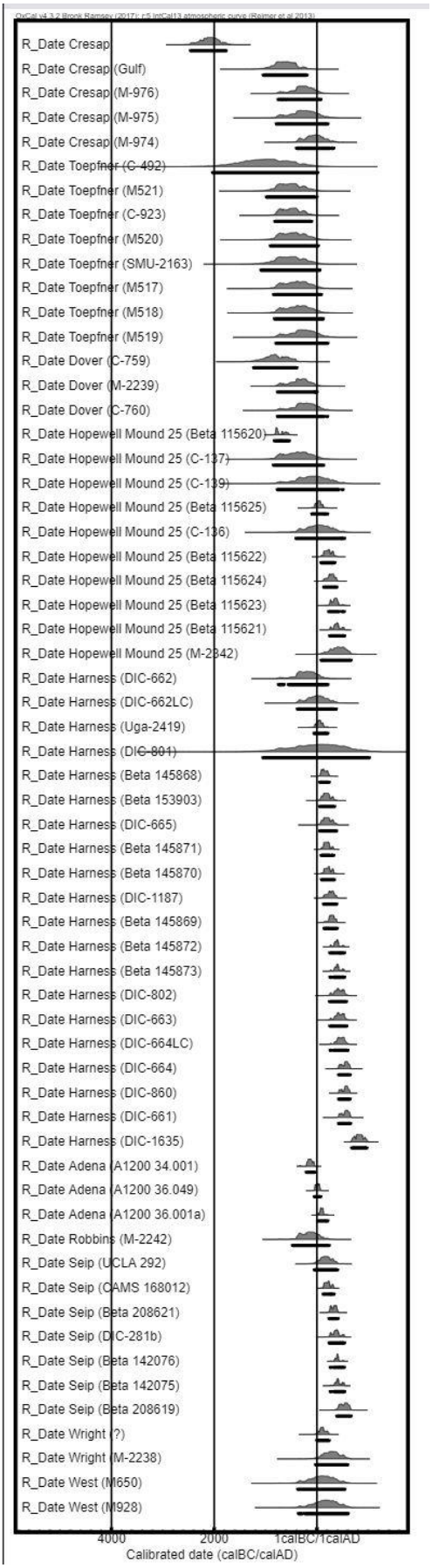

Figure 15: Multiple Plot of Site Date

Overall, there is not a clear trend of typology change across time. Other than Cresap Mound, all of the dated sites contain a simple log tomb. The simple log tomb seems to be the only type most persistent through time. The layered log tomb is largely seen in later sites, as Mound 25 of Hopewell Mound Group is the first instance of this tomb type and it is present in the latest five sites excluding Wright Mound. Interestingly, the burial pit tomb is only seen in the earliest sites (e.g. Cresap Mound and Toepfner Mound) and the latest sites (e.g. Wright Mound and West Mound). The log platform tomb and other log tombs do not indicate a particular trend in use over time. The sporadic nature of the typology across time would suggest that it is not a significant factor in the decision to construct one tomb type over another. Additionally, a mound containing one tomb type but not another would not appear to have any correlation with the time in which the mound was constructed based on the sites analyzed here.

Adena and Hopewell Log Tombs

For the purposes of analyzing log tombs without any limitations, the distinction between Adena and Hopewell mounds was set aside to focus generally on Early and Middle Woodland sites with log tomb(s). This allowed me to construct the typology above and apply this to time and space without the preconceived associations of these two groups. However, log tombs have widely been accepted as diagnostic of the Adena and for that reason, I will be bringing the Adena and Hopewell back into discussion to reconsider this generally held notion. The sites are split between Adena and Hopewell based on prior research and literature that defined the mound with a particular group, typically based on its form and materials present. There are 11 sites classified as Adena and 6 as Hopewell (see Appendix C), with the Caldwell Mound being the only site to have enough diagnostic characteristics of each group to remain unclassified.

While the number of log tomb sites is less for Hopewell, the total number of tombs is much closer with 97 log tombs in Adena mounds and 86 in Hopewell mounds. Through this analysis it has become clear that log tombs are almost equally prevalent at Hopewell mounds as the Adena mounds. The presence of a log tomb itself seems to give no indication of a site being identifiably Adena but rather appears to be a significant, more labor intensive, burial practice that persists from the Early Woodland period into the Middle Woodland period.

While a further examination of log tombs does not support its sole affiliation with the Adena, there are some differences to be mentioned between Adena and Hopewell log tombs. When considering the typology, all types are seen in both groups (see Figures 16 and 17). The only exception to this is that when burial pit log tombs are divided between circular and rectangular, it is apparent that circular pit log tombs are only seen in the Adena.

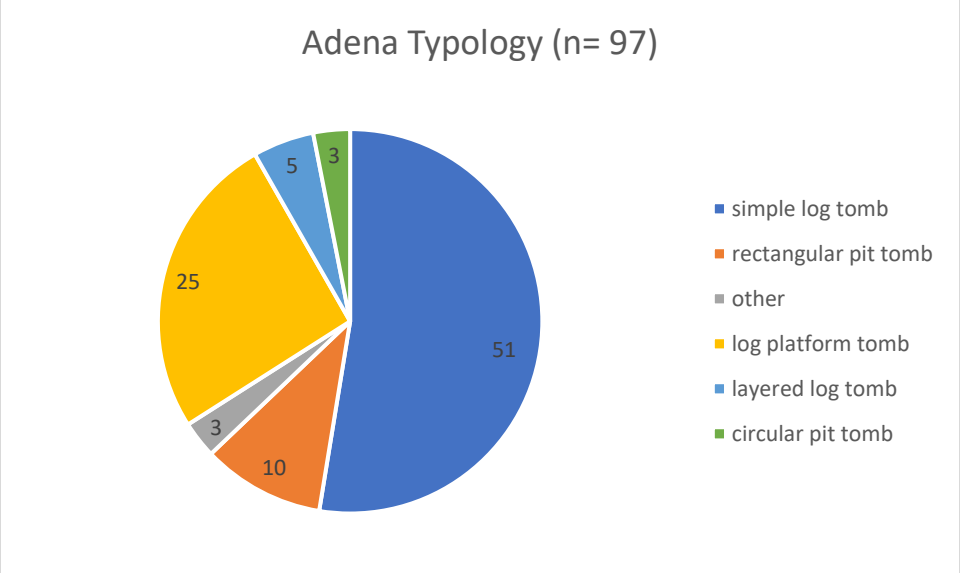

Figure 16: Pie Chart of Adena Log Tomb Typology

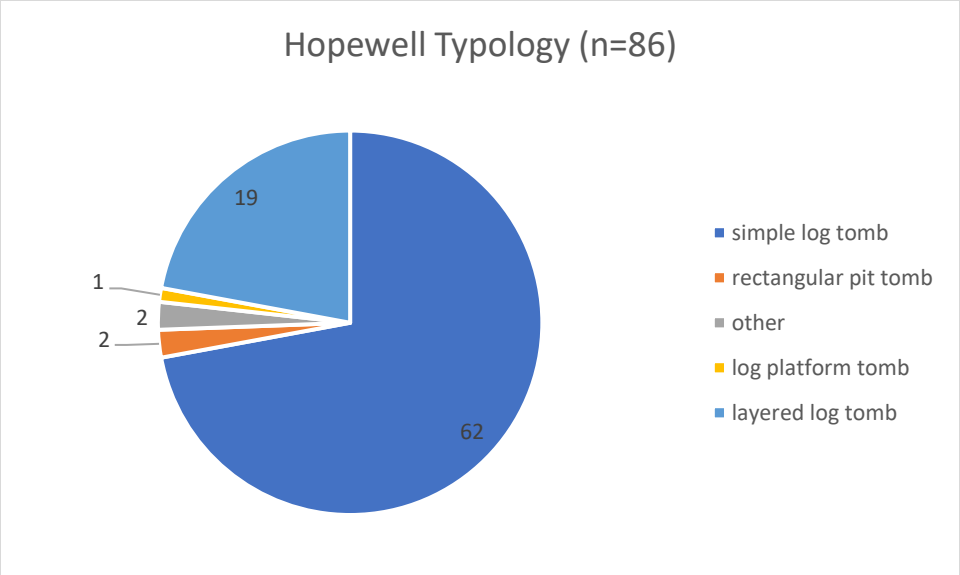

Figure 17: Pie Chart of Hopewell Log Tomb Typology

Looking at the above figures, both Adena and Hopewell log tombs are predominantly simple log tombs. However, they appear to make up a greater proportion of the Hopewell log tombs than Adena. Additionally, the number of layered log tombs increases much more in Hopewell mounds, but all other types decrease or are not at all present (e.g. circular pit tomb). Overall, the Hopewell mounds have less variation in the types of tombs present compared to Adena. It appears that the Hopewell are inclined to construct the tombs in a parallelogram form with the variation found in the tomb's size and the number of logs used for its construction. The Adena tombs, on the other hand, vary more in their design as they include circular tombs and many more platform tombs.

The other aspects of log tombs laid out above are also important for better understanding the distinction between Adena and Hopewell log tombs and the groups' shift in burial practices. The majority of the aspects described are prevalent in both and there does not appear to be a drastic change from one group to the next. However, the way in which the corpse is interred (cremated versus inhumed) and the tomb floor are worth evaluating.

Cremation and inhumation are seen in both Adena and Hopewell log tombs, yet cremation is more common across Hopewell log tombs (see Appendix D). There are rare instances, as seen at C&O Mound (15Jo9), where cremation is the main burial method in Adena log tombs. Generally speaking, though, cremation in Adena log tombs is often accompanying another inhumed burial. Hopewell log tombs have a greater density of tombs holding only cremated remains. Metzger Mound is the only instance of a Hopewell Mound that does not have a cremation in a log tomb. The trend from inhumation to cremation holds true for other Adena and Hopewell burials, as cremation is more common among Hopewell mounds (Webb and Snow 1945:140). This distinction appears to correspond with log tomb area as the average square footage is higher in Adena log tombs compared to Hopewell log tombs.

The tomb floor is another aspect of the burial that shows a clear distinction between Adena and Hopewell log tombs (see Appendix C). Log platform tombs make up a larger portion of the Adena log tombs and they often have a log, prepared, or unprepared floor. This is distinguished from the floor type "platform" which is a platform built up of clay or earth in which the log tomb is constructed. The platform floor type is very widespread among Hopewell log tombs but is only seen in one Adena log tomb at C&O Mound (15Jo9). The log floor, sometimes seen in log platform tombs, is only observed in Adena log tombs.

There are certain differences that cannot be overlooked such as the distinct shift in the floor and burial preparation from Adena to Hopewell log tombs. Additionally, the variability in tomb type appears to decrease from Adena to Hopewell as circular pit tombs disappear and simple log tombs increase to make up a higher proportion of Hopewell log tombs. In sum, while I have identified some important differences between Adena and Hopewell log tombs, the broad similarities underscore the fact that log tomb construction was an important practice for both

groups. Therefore, this invalidates original conceptions that log tombs are a diagnostic trait of the Adena.

Discussion

The current understanding of Adena and Hopewell burial practices developed from a prolonged period of excavations of Early and Middle Woodland period mounds (ca. 1840s-1960s) and the continued research of the produced archival materials and artifacts. Log tombs were an important burial practice for these groups, having been discovered containing some of the most richly adorned individuals which likely represented the most significant members of those societies. Log tombs drew enough attention that they came to be historically defined as an Adena trait though still recorded in high numbers within Hopewell mounds. In this project, I relied on archaeological reports, publications, and museum archives to delve into the practice of log tomb construction and challenge the preconceived ideas about their functions and social implications. The log tomb typology I created proved that log tombs are generally oversimplified in publications, as there is much variation in their design and use. However, the typology also draws attention to the trends in the log tomb construction and design enough to be applied across Early and Middle Woodland sites. Additionally, the other aspects I highlighted (e.g. base of the tomb, tomb and burial covering, presence of post-molds, tomb size, burial demographics, presence of artifacts), further demonstrate variability between tombs.

There has been a lack of comparative analysis among Adena and Hopewell log tombs, despite being one of the more complex burial practices of the Early and Middle Woodland periods. By historicizing the tombs and comparing this against the Adena-Hopewell dichotomy, it became clear that this was a burial practice that persisted into Hopewell mounds and held significance for both groups. Despite a general increase in complexity from Adena to Hopewell societies, which is especially apparent in mortuary objects and monumentality (Case and Carr 2008), Hopewell log tombs displayed less variability in comparison with Adena log tombs. Not only did circular pit

tombs disappear from the archaeological record, but the proportion of simple log tombs was higher in Hopewell mounds than Adena. This change in expression of log tomb variability suggests that the socio-religious meaning at Hopewell mounds either disappeared or was represented in alternative ways than Adena mounds.

Certain topics explored in my project had a weaker correlation than expected with log tomb typology, such as log tomb site dates and spatiality. While both of these aspects do not have a strong enough correlation with the typology to explain log tomb changes and variation, they do demonstrate the duration of the practice and the expansive area they cover. My research makes clear how the oversimplification and generalization of practices involved in log tomb construction limited our understandings of the intricacies of Woodland lifeways and religion. While trait lists have been significant in building our understanding of common Adena traits (Webb and Snow 1945), they define traits by too many variables or generalize the traits in a manner that overlooks the variety of that trait. Along with other studies (e.g. Clay 1987; Henry 2017), my analysis of Adena log tombs has demonstrated that a more thorough look into particular traits considered diagnostic of Adena will build our understanding of the group and their relation to the Hopewell.

Despite the success in constructing a log tomb typology and expanding our knowledge of log tomb design and construction, there were limitations that hindered a complete analysis of log tombs. Regarding log tomb design, the limitations are most apparent in publications for the Seip Mound (Shetrone and Greenman 1931) and Edwin Harness Mound (Mills 1907). Seip Mound contains many burials and tombs but unfortunately did not report descriptions for all the tombs. I was able to gain information from the summary section on the common characteristics seen in the burials to build on the knowledge provided about individual tombs. However, there were likely more log tombs in Seip Mound than recorded in my table for analysis (see Appendix D). Harness

Mound, on the other hand, categorized the mound's tombs into four categories, three of the four representing log tomb types seen in the mound. While the tomb categories were laid out, Mills did not specify how many tombs were in each category. However, there were enough dates available for the Harness Mound that I decided it was important to include Harness log tombs in my analysis. For this reason, I marked a single log tomb for each of the three categories specific to log tombs but this analysis would be improved with an accurate count of tombs for each category.

Another limitation, and perhaps the most obvious one, is that the majority of materials used for log tomb construction are perishable, only having preserved in the most remarkable of circumstances. Logs alone do not preserve very well, but often leave imprints or visible log molds that indicate they were once there. Crigler Mound, Ricketts Mound, and Robbins Mound all document simple log tombs that are missing a log on at least one side of the tomb. In these circumstances, it is hard to distinguish between the inattention of the excavator, the deterioration of the logs or other taphonomic processes, or a reality at the time of construction. Even harder to identify are signs of a bark lining (Webb and Snow 1945). Even if the bark remains somewhat preserved, it requires a trained eye to identify it. A bark lining is held to be a common practice in log tombs and was supported by the data in my analysis. Yet, only 84 of the 185 tombs had information recorded about the presence or absence of bark on the floor. The limited number of tombs with this information recorded makes it hard to definitively say that bark lining is in fact a commonality among log tombs.

Inconsistencies in what is published or even lack of record is another limiting factor of this research. The amount of inconsistencies is difficult to list, as it breaches many areas of this subject, but it is especially problematic for analysis of log tombs without a standardization of what information to include about a log tomb from excavation and the inconsistent typologies laid out

by previous archaeologists. Looking over the different aspects of the log tomb, it becomes clear that different authors chose to report different information and there are discrepancies in what is considered important to include. In my analysis of different factors, each aspect highlighted draws from different tombs and has varying amounts of recording across publications (see Appendix D). Inconsistent grouping or defining of log tombs also proves to be an obstacle. Most previous categorization of log tombs is either defined within an individual mound, not comparing across sites, or included in a trait list, typically defined by inconsistent variables. A goal of this research was to establish a more consistent log tomb typology that can be applied across Early and Middle Woodland sites and prevent such problems in the future.

While there were limitations present in this research, further work can apply a similar focus and method for other traits considered diagnostic of Adena to further our understanding of their societies and practices. In the case of log tombs, the social complexity of Adena became clearer with the evidence for more diversity among Adena log tombs than among those of the Hopewell. Deeper analysis on other traits could support and extend these results and increase our knowledge of the Adena-Hopewell relationship. Moreover, the analysis of log tombs could be taken further than this project. Given time constraints, I did not provide much analysis for the artifacts present in log tombs. With the extensive trait lists available and past research's focus on artifacts, an in-depth look at the artifact types and placement could broaden the discussion of this project and approach the distinction of Adena and Hopewell from a materials perspective.

The archives held at the William Webb Museum of Anthropology and the Ohio History Connection proved to be crucial in the undertaking of this project and overcoming some of the limitations stated above. Various other archaeologists have utilized the collections of the Webb Museum (e.g. Henry 2009, 2017) and Ohio History Connection (e.g. Everhart and Biehl 2020,

Everhart 2020) for developing their research. Without the reliance on such resources, many of the log tomb sites analyzed would have been left with little or no information. Access to original field reports, burial and feature data forms, and original log tomb sketches were essential for supplementing many publications that lacked detailed explanations of log tombs. The role museum collections played in this project shows the necessity for their preservation and use, and particularly their importance in ongoing and future archaeological research.

Conclusion

From the earliest mound excavations, log tombs have been a recognizable burial practice of Eastern Woodland moundbuilding groups. The wide acceptance of log tombs as a diagnostic trait of the Adena further demonstrates the intrigue with this burial practice and its social implications. However, research focused solely on log tombs has proven that log tombs are a practice that persists into the Middle Woodland period, seen in many Hopewell mounds. By wholly addressing the range of log tomb design, construction, and its other mortuary aspects, this burial practice is more clearly aligned with broader trends of the Woodland period.

A decrease in variability from Adena to Hopewell is revealed by log tombs, as indicated through the typology. However, a general comparison between Adena and Hopewell funerary rites, timber architecture, and practices of monumentality demonstrate an increase in social complexity from Adena to Hopewell. While log tombs seem contradictory to this narrative, considering broader trends in Hopewellian mortuary practices would suggest that the decrease in diversity among log tombs correlated with a shift in social structure and to new burial practices not seen in Adena mounds. The lack of standardization in Adena log tombs, especially in the context of leadership roles (Carr and Case 2005), suggests that Adena were more esoteric than Hopewell. Carr and Case explain that there is greater diversification of leaders seen in Hopewell than Adena because the sacred responsibilities are distributed across more people and more secular positions arise, either in combination with sacred roles or separate altogether. In the context of the Eastern Woodlands, the contrast of sacred and secular is meant in a much more fluid, spectral sense rather than a strict dichotomy as with the Western notion of secularism. There is evidence for Hopewell continuing to be a decentralized society (Henry 2017; Carr and Case 2005), but there is also some evidence for an increase in institutionalization (Carr and Case 2005). Such institutionalization

likely impacted mortuary practices, including the log tomb, and such standardizing of construction practice is seen in the decrease in Hopewell log tomb variability.

The role of the sacred world and ritual practice in Adena and Hopewell societies is important for understanding the significance of the log tomb. Beck and Brown (2011) explore religious movements of the Hopewell and the Mississippian by comparing two mound sites. They conclude that Hopewell is much more individualistic than Mississippian: "…Hopewell religion invoked an individual ecstatic experience… [and] focused on the here-and-now" (Beck and Brown 2011:83). While this is true in comparison to Mississippian, there is also a rise of Hopewellian leaders whose roles were more secular in nature when compared to its antecedents (Carr and Case 2005). This suggests that while Hopewell practiced a more individualized sense of ritual, this was even more true of the Adena as they had fewer leaders, particularly with secularized roles. The decrease in individualism overtime and a movement toward more secularized roles in society would suggest more standardization in social practices, specifically burial practices. This aligns with log tombs as there is evidence for a decrease in variability, and a much greater proportion of simple log tombs, from Adena to Hopewell tombs. To more fully test this correlation, more analysis needs to be completed on the material symbols contained within these graves.

Further research on artifacts present in log tombs, and other traits deemed diagnostic of Adena, would be beneficial in adding to the discussion of trends in the Eastern Woodlands, specifically the role of leadership and religiosity as demonstrated through mortuary practices. Overall, analyzing the log tomb across the greater Ohio River Valley for the Early and Middle Woodland period has helped to improve our understanding of the course of social complexity in the Eastern Woodlands. It could be assumed that a decrease in log tomb variability could suggest a paralleled decrease in social complexity. However, when brought into discussion with the nature

of leadership and religion in Woodland societies it is apparent that an increase in social complexity over time still occurs. The heterarchical nature of the Adena and Hopewell are supported in log tombs and the individuals interred within them.

References

Abrams, Elliot M.
2009 Hopewell Archaeology: A View from the Northern Woodlands. *Journal of Archaeological Research* 17(2):169–204.

Anonymous
1950 Hopewell Culture Mound Explored by Ross County Historical Society: 1946. Ohio Indian Relic Collectors Society 23:7-9.

Applegate, Darlene
2005 Woodland Taxonomy in the Middle Ohio Valley: A Historical Overview. In *Woodland Period Systematics in the Middle Ohio Valley*. Edited by D. Applegate and R. C. Mainfort Jr. 94-110, Tuscaloosa: University of Alabama Press.

Bache, Charles and Linton Satterthwaite, Jr.
1930 Excavation of an Indian Mound at Beech Bottom, West Virginia. In *The Museum Journal*, 21: 133-163. Philadelphia: Museum of the University of Pennsylvania.

Beck Jr., Robin A. and James A. Brown
2011 Political Economy and the Routinization of Religious Movements: A View from the Eastern Woodlands. In *Archaeological Papers of the American Anthropological Association* 21(1): 72-88.

Black, Deborah Bush
1979 Adena And Hopewell Relations in the Lower Hocking Valley. In *Hopewell Archaeology: The Chillicothe Conference*, edited by D. S. Brose and N. Greber, 19-26. Kent: Kent State University Press.

Black, Glenn A.
1936 Excavation of the Nowlin Mound. *Indiana History Bulletin* 13: 207–305.

Brown, James
2012 *Mound City: The Archaeology of a Renown Ohio Hopewell Mound Center*. Lincoln, Nebraska: Midwest Archaeological Center, National Park Service, Special Report 6.

Carr, Christopher and D. Troy Case
2005 *Gathering Hopewell*. Interdisciplinary Contributions to Archaeology. Boston, MA: Springer.

Case, D. Troy and Christopher Carr
2008 *The Scioto Hopewell and Their Neighbors*. Interdisciplinary Contributions to Archaeology. New York, NY: Springer.

Clay, R. Berle
1986 Adena Ritual Spaces. In *Early Woodland Archaeology*. Edited by K. B. Farnsworth and T. E. Emerson, 581-595. Kampsville: Center for American Archaeology.

1987 Circle and Ovals: Two Types of Adena Space. *Southeastern Archaeology* 6: 46-56.
1988 Peter Village: An Adena Enclosure. In *Middle Woodland Settlement and Ceremonialism in the Mid-South and Lower Mississippi Valley*, edited by R. C. Mainfort Jr., 19-30. Archaeological Report No. 22. Jackson: Mississippi Department of Archives and History
1998 The Essential Features of Adena Ritual and Their Implications. *Southeastern Archaeology* 17: 1-21.
2005 Adena: Rest in Peace? In *Woodland Period Systematics in the Middle Ohio Valley*. Edited by D. Applegate and R. C. Mainfort Jr. 94-110, Tuscaloosa: University of Alabama Press.

Cramer, Ann C.
2008 The Dominion Land Company Site. In *Transitions: Archaic and Early Woodland Research in the Ohio Country*, 284-333. Athens: Ohio University Press.

Crane, Horace R., and James B. Griffin
1958 University of Michigan Radiocarbon Dates, Series 3. *American Journal of Science* 128:1117–1123.
1961 University of Michigan Radiocarbon Dates, Series 6. *American Journal of Science Radiocarbon Supplement* 3: 111-116.
1972 University of Michigan Radiocarbon Dates, Series 14. *American Journal of Science Radiocarbon Supplement* 14(1): 155-194.

Dille, I.
1866 Sketch of Ancient Earthworks. In *Annual Report of the Board of Regents of the Smithsonian Institution* 359-362.Washington: Government Printing Office.

Dragoo, Don W.
1963 *Mounds for the Dead*. Annals of the Carnegie Museum Volume 37. Pittsburg: Carnie Museum.
1964 The Development of Adena and its Role in the Formation of Ohio Hopewell. In *Hopewellian Studies*, edited by J. R. Caldwell and R. L. Hall 2-34. Illinois State Museum Scientific Papers 12. Springfield: Illinois State Museum.

Dun, Walter A.
1884-85 The Deercreek Mound. In *Cincinnati Society of Natural History* 7:194-203. Cincinnati: Elm Street Printing Company.

Everhart, Timothy D.
2020 The Case of the Caldwell Mound: A Woodland Period Mound in the Central Scioto River Valley. In *Midcontinental Journal of Archaeology*.

Everhart, Timothy D. and Stephen M. Biehl
2020 New Evidence Pertaining to an Alleged Hopewell Mobiliary Clay Human Figurine: A Reply to Bebber and Colleagues. In *Midcontinental Journal of Archaeology*.

Everhart, Timothy D. and Bret J. Ruby
2020 Ritual Economy and the Organization of Scioto Hopewell Craft Production:

Insights from the Outskirts of the Mound City Group. *American Antiquity* 85(2):1-26.

Fagette, Paul
1996 *Digging for Dollars: American Archaeology and the New Deal*. Albuquerque: University of New Mexico.

Fowke, Gerard and W. K. Moorehead
1894 Recent Mound Exploration in Ohio. In *Proceedings of the Academy of Natural Sciences of Philadelphia* 46: 308-321. Academy of Natural Sciences.

Fowke, Gerard
1902 *Archaeological History of Ohio: The Mound Builders and Later Indians*. Ohio State Archaeological and Historical Quarterly.

Greber, N'omi B.
1979 Variations in Social Structure of Ohio Hopewell Peoples. *Midcontinental Journal of Archaeology* 4: 35-78.
1983 Recent Excavations at the Edwin Harness Mound, Liberty Works, Ross County, Ohio. *Midcontinental Journal of Archaeology* 5.
1991 A Study of Continuity and Contrast between Central Scioto Adena and Hopewell Sites. *West Virginia Archeologist* 43: 1–26.
2003 Chronological Relationships Among Hopewell Sites: Few Dates and Much Complexity. In *Theory, Method, and Practice in Modern Archaeology*. Edited by Robert J. Jeske and Douglas K. Charles 88-113. Westport, CT: Praeger.
2005 Adena and Hopewell in the Middle Ohio Valley: To Be or Not to Be? In *Woodland Period Systematics in the Middle Ohio Valley*. Edited by D. Applegate and R. C. Mainfort Jr. 19-39, Tuscaloosa: University of Alabama Press.

Greenman, Emerson F.
1932 Excavation of the Coon Mound and an Analysis of the Adena Culture. *Ohio State Archaeological and Historical Quarterly* 41: 366-523.

Griffin, J. B.
1952 Culture periods in Eastern United States Archaeology. In *Griffin* (ed.) 1952: 352–64.

Hays, Christopher Hays
2010 Adena Mortuary Patterns in Central Ohio. *Southeastern Archaeology* 29: 106-120.

Heilman, J.M.
1970 Archaeological Survey of Wayne County, Indiana, Department of Anthropology, Unpublished Master's thesis. Indiana University, Bloomington, Indiana.

Henry, Edward R.
2009 Geophysical Prospection and Excavation at an Early Woodland Ceremonial Circle in Bourbon County, KY. Unpublished Master's Thesis, Department of Anthropology, University of Mississippi, Oxford, MS.

2017 Building Bundles, Building Memories: Processes of Remembering. In *Adena-Hopewell Societies of Eastern North America*. 188-228.

Henry, Edward R. and Casey R. Barrier
2016 The Organization of Dissonance in Adena-Hopewell Societies of Eastern North America. *World Archaeology*, 48:1, 87-109.

Jefferies, Richard W., George R. Milner, and Edward R. Henry
2013 Winchester Farm: A Small Adena Enclosure in Central Kentucky. In *Early and Middle Woodland Landscapes of the Southeast*. Edited by A. P. Wright and E. R. Henry, 91-107, Gainesville: University Press of Florida.

Lenhart, Mary Fran
1968 Interim Report of White Site. In *Archaeological Reports*, edited by B.K. Swartz, Jr. Muncie: Ball State University.

Lepper, Bradley T., Karen L. Leone, Kathryn A. Jakes, Linda L. Pansing, and William H. Pickard
2014 Radiocarbon Dates on Textile and Bark Samples from the Central Grave of the Adena Mound (33RO1), Chillicothe, Ohio. *Midcontinental Journal of Archaeology* 39: 201-221.

Libby, Willard F.
1952 *Radiocarbon Dating*. Chicago: University of Chicago Press.
1955 *Radiocarbon Dating* 2:91-100. Chicago: University of Chicago Press.

Lynott, Mark J.
2014 *Hopewell Ceremonial Landscapes of Ohio: More than Mounds and Geometric Earthworks. American Landscapes*. Vol. 1. Oxbow, Oxford, UK.

MacLean, J.P.
1879 *The Mound Builders*.

Maslowski, Robert F., Charles M. Niquette, and Derek M. Wingfield
1995 The Kentucky, Ohio, and West Virginia Radiocarbon Database. *West Virginia Archaeologist* 47:1-75.

Mills, William C.
1902 Excavations of the Adena Mound. *Ohio State Archaeological and Historical Quarterly* X: 451–79.
1906 Exploration the Baum Prehistoric Village Site. *Ohio Archaeological and Historical Quarterly* 15: 45-136.
1907 Exploration of the Edwin Harness Mound. *Ohio State Archaeological and Historical Quarterly* XVI.
1917 Exploration of the Westenhaver Mound. *Ohio Archaeological and Historical Quarterly* XXVI: 226-266.

1922 Exploration of the Mound City Group, Ross County. *Ohio Archaeological and Historical Quarterly* 31: 423-584.

Moorehead, Warren K.
1892 *The Primitive Man of Ohio*. New York: Putnam, Knickerbocker Press.

Morris, Ben J.
1970 An Archaeological Survey of Randolph County, Indiana. In *Archaeological Reports*, Edited by B.K. Swartz, Jr. (8). Muncie: Ball State University.

Norris, Rae
1985 Excavation of the Toepfner Mound. *Archaeology of Eastern North America* 13:128-137. Eastern States Archeological Federation.

Porter, Tom and Don McBeth
1958 Report on the West Mound. *Ohio Archaeologist* 8: 29-31.

Prufer, Olaf H.
1961 The Hopewell Complex of Ohio. Unpublished Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, Massachusetts.
1964 The Hopewell Complex of Ohio. In *Hopewellian Studies*. Scientific Papers 12. Edited by J. R. Caldwell and R. L. Hall, 35-83. Springfield: Illinois State Museum.

Putnam, F. W. and C. L. Metz
1886 Explorations in Ohio. *The 18th Report of the Peabody Museum*, 449-466.

Saunders, Joe W., Rolfe D. Mandel, C. Garth Sampson, Charles M. Allen, E. Thurman Allen, Daniel A. Bush, James K. Feathers, Kristen J. Gremillion, C. T. Hallmark, H. Edwin Jackson, Jay K. Johnson, Reca Jones, Roger T. Saucier, Gary L. Stringer and Malcolm F. Vidrine
2005 Watson Brake, a Middle Archaic Mound Complex in Northeast Louisiana. *American Antiquity* 70(4): 631-668.

Schooley, Matthew
1902 *The Peters Creek Indian Mound, Monongahela Valley, Pennsylvania*. Homestead, PA.

Seeman, Mark F.
1986 Adena and the Implication for Early Woodland Settlement Models in the Ohio Valley. In *Early Woodland Archaeology*. Edited by K. B. Farnsworth and T. E. Emerson, 564-576. Kampsville: Center for American Archaeology.

Setzler, Frank P.
1930 The Archaeology of Whitewater Valley. In *Indiana History Bulletin* 7: 353-549. Indianapolis: Indiana Historical Bureau.

Shetrone, Henry C.
1920 The Culture Problem in Ohio Archaeology. *American Anthropologist* 22: 142-172.

1926 Exploration of the Hopewell Group of Prehistoric Earthworks. In *Ohio Archaeological and Historical Quarterly* 35(1):1-277.
1964 *The Mound-Builders*.

Shetrone, Henry C. and Emerson F. Greenman
1931 Exploration of the Seip Group of Prehistoric Earthworks. *Ohio Archaeological and Historical Quarterly* 40: 343-509.

Solecki, Ralph S.
1953 Exploration of an Adena Mound at Natrium, West Virginia. In *Bureau of American Ethnology Bulletin* 151 (40):313–395.

Spielmann, Katherine A., Jarrod Burks, Steven L. DeVore, Scott Ingram, Sophia Kelly, Melissa Kruse, and Mason Scott Thompson
2005 *Field Report for the Arizona State University Archaeological Field School, Summer 2005 Excavations at Seip Earthwork (33Ro40)*. Report on file, Ohio Historical Society, Columbus.

Squier, Ephraim G. and Edwin H. Davis
1848 *Ancient Monuments of the Mississippi Valley: Comprising the Results of Extensive Original Surveys and Explorations*. Washington, D.C.: Smithsonian Contributions to Knowledge 1.

Sutton, Ernest
1958 Doodridge County Mounds. *West Virginia Archaeologist*, 10: 23-27. Moundsville.

Swartz Jr., B. K., Editor
1971 *Adena: The Seeking of an Identity*. Muncie: Ball State University.

Thomas, Cyrus
1894 Report on the Mound Explorations. In *The Annual Report of the Bureau of American Ethnology* 12.

Webb, William S.
1940 *The Wright Mounds: Sites 6 and 7 Montgomery County, Kentucky*. Reports in Anthropology and Archaeology 5(1). University of Kentucky, Lexington.
1943 *Crigler Mounds: Sites Be27 and Be32, and the Hartman Mound: Site Be32 Boone County, Kentucky*. Reports in Anthropology and Archaeology 5(6). University of Kentucky, Lexington.

Webb, William S. and Raymond Baby
1957 *Adena People, No. 2*. Columbus: Ohio Historical Society.

Webb, William S. and John Elliot
1942 *The Robbins Mounds, Be3 and Be14, Boone County, Kentucky*. Reports in Anthropology and Archaeology 5(5). University of Kentucky, Lexington.

Webb, William S. and William D. Funkhouser
1940 *The Ricketts Site in Montgomery County, Kentucky*. Reports in Anthropology and Archaeology 3(3). University of Kentucky, Lexington.

Webb, William S., William G. Haag, and Charles E. Snow
1942 *The C. and O. Mounds at Paintsville: Sites Jo2 and Jo9, Johnson County, Kentucky*. Reports in Anthropology and Archaeology 5(4). University of Kentucky, Lexington.

Webb, William S. and Charles E. Snow
1945 *The Adena People*. Reports in Anthropology and Archaeology, 6. Lexington: University of Kentucky.
1959 *The Dover Mound*. The University of Kentucky Press.

Wetmore, Prosper M.
1887-1888 Earthworks of Franklin County, Ohio. *Ohio Archaeological and Historical Quarterly* 1.

Wymer, Dee Anne and Elliot Abrams
2003 Early Woodland Plant Use and Gardening: Evidence from an Adena Hamlet in Southeastern Ohio. *Midcontinental Journal of Archaeology* 28:175-194.

Appendix

Site	Lab #	Context	Material	RCYBP	2 sigma calibrated results	Reference
Cresap	Gulf		Charcoal	3685 ± 123	2458- 1770 BC	Dragoo 1963
Cresap	Gulf		Charcoal	2506 ± 175	1044- 197 BC	Dragoo 1963
Cresap	M-976		Charcoal	2240 ± 150	753 BC-AD 76	Crane and Griffin 1961
Cresap	M-975		Charcoal	2190 ± 200	789 BC-AD 210	Crane and Griffin 1961
Cresap	M-974		Charcoal	2020 ± 150	394 BC-AD 325	Crane and Griffin 1961
Toepfner	C-492		Charcoal	2780 ± 410	2028 BC-AD 17	Libby 1955
Toepfner	SMU-2163	Feature 6, Burial 24		2414 ± 235	980- 3 BC	Maslowski 1995
Toepfner	M521		Charcoal	2410 ± 200	816- 106 BC	Crane and Griffin 1958
Toepfner	C-923		Charcoal	2377 ± 150	903 BC-AD 25	Libby 1955
Toepfner	M517		Charcoal	2300 ± 200	1085 BC-AD 55	Crane and Griffin 1958
Toepfner	M520		Charcoal	2350 ± 200	842 BC-AD 85	Crane and Griffin 1958
Toepfner	M518		Charcoal	2280 ± 200	822 BC-AD 121	Crane and Griffin 1958
Toepfner	M519		Charcoal	2200 ± 200	794 BC-AD 210	Crane and Griffin 1958
Dover	C-759	Upper Zone of mound	Charcoal	2650 ± 175	1230-395 BC	Libby 1955
Dover	M-2239		Charcoal	2260 ± 140	765- 2 BC	Libby 1955
Dover	C-760		Charcoal	2169 ± 175	764 BC-AD 206	Libby 1955
Hopewell Mound Group, Mound 25	Beta 115620			2570 ± 50	827- 540 BC	Greber 2003
Hopewell Mound Group, Mound 25	C-137			2285 ± 210	844 BC-AD 129	Libby 1955
Hopewell Mound Group, Mound 25	C-139			2044 ± 250	770 BC-AD 505	Libby 1955
Hopewell Mound Group, Mound 25	Beta 115625			1960 ± 50	95 BC-AD 208	Greber 2003
Hopewell Mound Group, Mound 25	C-136			1951 ± 200	404 BC-AD 536	Libby 1955
Hopewell Mound Group, Mound 25	Beta 115622			1800 ± 50	AD 85- 345	Greber 2003

Hopewell Mound Group, Mound 25	Beta 115624			1760 ± 50	AD 137- 386	Greber 2003
Hopewell Mound Group, Mound 25	Beta 115623			1690 ± 50	AD 231- 532	Greber 2003
Hopewell Mound Group, Mound 25	Beta 115621			1660 ± 50	AD 254-536	Greber 2003
Hopewell Mound Group, Mound 25	M-2342			1620 ± 140	AD 88- 660	Crane and Griffin 1972
Harness	DIC-662			2150 ± 155	745 BC-AD 213	Greber 1983
Harness	DIC-662LC			1980 ± 155	378 BC-AD 376	Greber 1983
Harness	DIC-1189			1950 ± 1	AD 25- 75	Greber 1983
Harness	Uga-2419			1950 ± 55	54 BC-AD 210	Greber 2003
Harness	DIC-801			1900 ± 460	1047 BC-AD 1017	Greber 1983
Harness	Beta 145868	Putnam Burial Chamber 9	Charred Hickory	1870 ± 40	AD 59- 239	Greber 2003
Harness	Beta 153903	CMNH Feature 17	Charred Hickory	1830 ± 60	AD 57-341	Greber 2003
Harness	Beta 145871	North Room, deposit	Charred Non-Conifer Bark	1820 ± 40	AD 58- 381	Greber 2003
Harness	DIC-665			1820 ± 70	AD 85- 325	Greber 1983
Harness	Beta 145870	North Room, deposit	Charred Non-Conifer Bark	1800 ± 40	AD 94- 338	Greber 2003
Harness	DIC-1187			1770 ± 50	AD 133- 383	Greber 1983
Harness	Beta 145869	Putnam Burial Chamber 9	Charred Hickory	1750 ± 40	AD 144- 392	Greber 2003
Harness	Beta 145872	North Room, deposit	North Room, deposit	1660 ± 40	AD 256- 534	Greber 2003
Harness	Beta 145873	CMNH Feature 30	Charred Wood	1650 ± 40	AD 260- 536	Greber 2003
Harness	DIC-802			1630 ± 70	AD 250- 572	Greber 1983
Harness	DIC-663			1620 ± 65	AD 256- 580	Greber 1983
Harness	DIC-664LC			1600 ± 65	AD 263-600	Greber 1983
Harness	DIC-664			1500 ± 60	AD 426- 647	Greber 1983
Harness	DIC-860			1500 ± 50	AD 428- 645	Greber 1983
Harness	DIC-661			1490 ± 65	AD 425- 653	Greber 1983
Harness	DIC-1635			1200 ± 65	AD 681- 971	Greber 1983

Adena	A1200 34.001		Textile	2110 ± 30	204- 46 BC	Lepper 2014
Adena	A1200 36.049		Bark	1990 ± 30	49 BC-AD 72	Lepper 2014
Adena	A1200 36.001a		Bark	1910 ± 30	AD 21- 209	Lepper 2014
Robbins	M-2242			2100 ± 140	471 BC-AD 237	Webb and Elliot 1942
Seip	UCLA 292			1845 ± 100	47 BC-AD 400	Greber 1983
Seip	CAMS 168012	Textile A957/ 2183.06	Textile	1805 ± 35	AD 126- 330	Armitage and Jakes 2016: 30
Seip	Beta 208621	ASU Feature 21, Unit 4, Lot 155	Charred Material	1710 ± 40	AD 241- 411	Spielmann et al. 2005
Seip	DIC-281a			1670 ± 10	AD 342- 409	Baby and Langlois 1977
Seip	DIC-281b			1670 ± 55	AD 243- 535	Baby and Langlois 1979
Seip	Beta 142076	Shetrone Burial 32	Charred American Elm	1650 ± 30	AD 264- 533	Greber 2003
Seip	Beta 142075	Shetrone Burial 16	Charred poplar, willow	1640 ± 40	AD 266- 538	Greber 2003
Seip	Beta 208619	ASU Feature 13, Unit 4, Lot 171	Charcoal	1510 ± 80	AD 392- 660	Spielmann et al. 2005
Wright	?			1900 ± 200	AD 3- 236	Crane and Griffin 1972
Wright	M-2238			1740 ± 150	21 BC-AD 597	Crane and Griffin 1972
West	M650			1890 ± 200	370 BC-AD 543	Crane and Griffin 1958
West	M928			1830 ± 200	356 BC-AD 606	Crane and Griffin 1961

Appendix A: Radiocarbon Dates of Mounds with Log Tombs

Site	State site number	County	State	# of tombs	References
Peters Creek Mound		Allegheny	Pennsylvania	1	Dragoo 1963, Schooley 1902
McKee Rocks Mound		Allegheny	Pennsylvania	1	Dragoo 1963
Mound 43 (The Beard Mound)		Athens	Ohio	1	Greenman 1932
Mound 45		Athens	Ohio	1	Greenman 1932
Mound 46		Athens	Ohio	1	Greenman 1932, Fowke 1902, Squier and Davis 1848, Thomas 1894
Coon Mound		Athens	Ohio	1	Greenman 1932
Robbins (Mound 79, Be 3)	15BE3	Boone	Kentucky	49	Webb and Snow 1945, Webb and Elliot 1942
Robbins (Mound 80, Be 27)	15BE27	Boone	Kentucky	6	Webb and Snow 1945, Webb and Elliot 1942

Crigler (Mound 81, Be 20)	15Be20	Boone	Kentucky	1	Webb and Snow 1945, Webb 1943
Mound 54		Brooke	West Virginia	1	Greenman 1932, Bache and Satterthwaite 1930
Schmitz (Mound 115)		Brown	Ohio	1 possible	Webb and Snow 1945,
Mound 25		Clinton	Ohio	1	Greenman 1932, Dragoo 1963, Moorehead 1892
Toepfner Mound (Dublin Road or Pope Mound)	33FR43	Franklin	Ohio	8	Baby 1953-54, Norris 1985
Nowlin (Mound 148)		Dearborn	Indiana	7	Webb and Snow 1945, Swartz 1971, Black 1936
Mound Camp (Mound 48)		Franklin	Indiana	1	Greenman 1932, Swartz 1971, Setzler 1930
Whitehead (Mound 149)		Franklin	Indiana	?	Webb and Snow 1945, Swartz 1971, Setzler 1930
Dominion Land Company Site	33FR12	Franklin	Ohio	?	Wetmore 1887-88, Swartz 1971, Cramer 2008
Mound 27		Hamilton	Ohio	1	Greenman 1932
White		Henry	Indiana	?	Lenhart 1968, Swartz 1971
Salt Creek Mound or Davis (Mound 20)		Hocking	Ohio	1	Greenman 1932, Webb and Snow 1945, Fowke 1902, Thomas 1894
Mound 42		Hocking	Ohio	1	Greenman 1932, Fowke 1902, Fowke and Moorehead 1894
C&O (Mound 77, Jo 2)	15Jo2	Johnson	Kentucky	1	Webb and Snow 1945, Webb, Haag, and Snow 1942
C&O (Mound 78, Jo 9)	15Jo9	Johnson	Kentucky	9	Webb and Snow 1945, Webb, Haag, and Snow 1942
Mound 57		Kanawha	West Virginia	1	Greenman 1932, Thomas 1894
Mound 58		Kanawha?	West Virginia	1	Greenman 1932, Thomas 1894
Mound 59 (Great Smith?)		Kanawha?	West Virginia	1	Greenman 1932, Thomas 1894, Fowke 1902
Mound 60		Kanawha?	West Virginia	1	Greenman 1932, Thomas 1894
Mound 61		Kanawha?	West Virginia	3	Greenman 1932, Thomas 1894, Fowke 1902
Mound 64		Kanawha?	West Virginia	1	Greenman 1932, Thomas 1894

Mound 38 (The Cemetery Mound)		Knox	Ohio	1	Greenman 1932, Thomas 1894
Mound 40		Licking	Ohio	1	Greenman 1932, MacLean 1879, Dille 1866, Dille 1866
Muskingum Group		Marietta, Parkersburg, Doodridge	Ohio and West Virginia	?	Swartz 1971, Sutton 1958
Cresap Mound	46MR7	Marshall	West Virginia	1	Dragoo 1963
Natrium Mound		Marshall	West Virginia	2	Dragoo 1963, Solecki 1953
Welcome Mound	46MR3	Marshall	West Virginia	2	Dragoo 1963
Grave Creek Mound (Mound 55)	46MR1	Marshall	West Virginia	2	Dragoo 1963, Greenman 1932
Dover Mound	15MS27	Mason	Kentucky	5	Dragoo 1963, Webb and Snow 1959
Mound 170		Mason	West Virginia	?	Webb and Snow 1945, Thomas 1894
Ricketts (Mound 71, Mm 3)	15Mm3	Montgomery	Kentucky	15	Webb and Snow 1945
Wright (Mound 73)	15MM7	Montgomery	Kentucky	1	Webb and Snow 1945, Webb 1940
Ricketts (Mound 71, Mm 3)	15Mm3	Montgomery	Kentucky	15	Webb and Snow 1945
Mound 32 (The Fortney Mound)		Montgomery	Ohio	1	Greenman 1932
Westenhaver Mound (Mound 12)	A0124	Pickaway	Ohio	1	Greenman 1932, Mills 1917
McEvers Mound (Mound 53)		Pike	Illinois	1	Greenman 1932
Mound 5		Pike	Ohio	?	Webb and Snow 1945

Mound 17		Pike	Ohio	1	Greenman 1932, Fowke 1902
Mound 19		Pike	Ohio	3	Greenman 1932, Fowke 1902
Mound 34		Preble	Ohio	1	Greenman 1932
Fudge Mound (Mound 52)		Randolph	Indiana	1	Greenman 1932, Setzler 1971, Swartz 1971, Squier and Davis 1848, Shetrone 1964
Law		Randolph	Indiana	?	Swartz 1971, Morris 1970
Adena Mound (Mound 1)	33RO1	Ross	Ohio	11	Mills 1902, Greenman 1932, Shetrone 1964
Mound 2 (Harness Mound)		Ross	Ohio	1	Greenman 1932, Fowke 1902, MacLean 1879, Squier and Davis 1848
Mound 5 (Carriage Factory Mound)	33RO08	Ross	Ohio	1	Greenman 1932, Moorehead 1892
Mound 6 (Story Mound)	33RO44	Ross	Ohio	1	Greenman 1932, Moorehead 1892
Mound 9 (on property of John Madeira)		Ross	Ohio	1	Greenman 1932, Fowke 1902, Moorehead 1892
Mound 10 (on Worthington estate)		Ross	Ohio	1	Greenman 1932, Squier and Davis 1848, Fowke 1902, Moorehead 1892, Webb and Snow 1945
Mound 11 (on Worthington estate)		Ross	Ohio	2	Greenman 1932, Squier and Davis 1848, Fowke 1902, Moorehead 1892

Metzger Mound (Mound 13)	33RO30	Ross	Ohio	4	Fowke and Moorehead 1894, Greenman 1932, Webb and Snow 1945
Deercreek Mound (Mound 15)		Ross	Ohio	1	Greenman 1932, Dun 1884-85
Overly Mound (Mound 16)	33RO37	Ross	Ohio	2	Mills 1911, Greenman 1932
Mound 92		Ross	Ohio	1?	Webb and Snow 1945, Squier and Davis 1848
Pyramidal (Mound 127		Ross	Ohio	?	Webb and Snow 1945
Dunlap (Mound 144)		Ross	Ohio	1	Webb and Snow 1945
Edwin Harness Mound	33RO22	Ross	Ohio	?	Mills 1907, Greber 1983
Kinsley		Shelby	Indiana	?	Swartz 1971
Crall Mound		Washington	Pennsylvania	1	Thomas 1894, Dragoo 1963
Bertsch		Wayne	Indiana	?	Swartz 1971, Heilman 1970
Stone (Mound 76, Bh 15)	15CK89	Clark	Kentucky	3	Webb and Snow 1945
Ater Mound	33Ro63	Ross	Ohio	1?	Prufer 1961
Hopewell 23, 25, and 26		Ross	Ohio	18	Shetrone 1926
Mound City (Mound 7)		Ross	Ohio	5	Mills 1922, Brown 2012
Seip Mound		Ross	Ohio	53	Prufer 1961, Shetrone and Greenman 1931
Caldwell Mound		Ross	Ohio	1	Prufer 1961, Everhart 2020
West Mound		Highland	Ohio	4	Porter and McBeth 1958

Appendix B: List of Sites Containing Log Tomb(s)

Mound	Feature	Burial/ Skeleton	Tomb	typology	Floor type	Tomb Area	People Group	Reference
Coon	NA	NA	Only one	other	pit	190.05 sq ft	Adena	Greenman 1932
Adena	NA	1 and 2	1*	layered log tomb	floor		Adena	Mills 1902
Adena	NA	4	2*	simple log tomb	floor		Adena	Mills 1902
Adena	NA	8	3*	simple log tomb	floor	15.59 sq ft	Adena	Mills 1902
Adena	NA	9 and 10	4*	other	floor		Adena	Mills 1902
Adena	NA	11	5*	simple log tomb	floor	32 sq ft	Adena	Mills 1902
Adena	NA	12	6*	simple log tomb	floor	84 sq ft	Adena	Mills 1902
Adena	NA	15 and 16	7*	simple log tomb	log floor		Adena	Mills 1902
Adena	NA	14	8*	simple log tomb	floor		Adena	Mills 1902
Adena	NA	17	9*	layered log tomb	floor		Adena	Mills 1902
Adena	NA	21	10*	layered log tomb	floor		Adena	Mills 1902
Crigler	3	11, 12, and 13	5	simple log tomb	floor	66 sq ft	Adena	Snow, Charles E., Crigler Mound (15Be20) Burial and Feature Data Forms, 1940-1942, OHC, Columbus, OH
Crigler	4	9 and 10	6	simple log tomb	floor	64.69 sq ft	Adena	Snow, Charles E., Crigler Mound (15Be20) Burial and Feature Data Forms, 1940-1942, OHC, Columbus, OH
Toepfner	1	4, 5, 6	NA	simple log tomb	floor		Adena	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH

Toepfner	2	7 and 8	NA	simple log tomb	floor	51 sq ft	Adena	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH
Toepfner	3	9 and 16	NA	simple log tomb	log floor		Adena	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH
Toepfner	4	10, 11, and 12	NA	simple log tomb	log floor	39 sq ft	Adena	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH
Toepfner	5	13, 14, 15b	NA	simple log tomb	log floor	49.4 sq ft	Adena	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH
Toepfner	6	18 and 19	NA	log platform tomb	floor	57.96 sq ft	Adena	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH
Toepfner	7	25 and 26	NA	simple log tomb	floor	46.8 sq ft	Adena	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH
Toepfner	9	31, 32, 40	NA	rectangular pit tomb	pit		Adena	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH
Wright	5	1		simple log tomb	floor		Adena	Webb 1940
Wright	8	2		log platform tomb	NA	12 sq ft	Adena	Webb 1940
Wright	10	6(7)		circular pit tomb	pit	38.48 sq ft	Adena	Webb 1940
Wright	15	3		simple log tomb	floor	36 sq ft	Adena	Webb 1940
Wright	16	5		rectangular pit tomb	pit		Adena	Webb 1940

Wright	17	8		simple log tomb	pit	38.4 sq ft	Adena	Webb 1940
Wright	18	(9)11		log platform tomb	floor		Adena	Webb 1940
Wright	19	13		rectangular pit tomb	pit		Adena	Webb 1940
Wright	20	14		simple log tomb	NA		Adena	Webb 1940
Wright	21	15		rectangular pit tomb	pit	24 sq ft	Adena	Webb 1940
Wright	22	(20)21		rectangular pit tomb	pit	255 sq ft	Adena	Webb 1940
Wright	23	17		log platform tomb	pit		Adena	Webb 1940
Wright	24	18		rectangular pit tomb	floor	62.64 sq ft	Adena	Webb 1940
Wright	26	16		simple log tomb	floor	35 sq ft	Adena	Webb 1940
Overly			1* (first in field notes)	simple log tomb	floor	28 sq ft	Adena	Mills, William, Original Record Book, 1911, Mills' Record Book, OHC, Columbus, OH
Overly			2* (second in field notes)	simple log tomb	floor		Adena	Mills, William, Original Record Book, 1911, Mills' Record Book, OHC, Columbus, OH
C&O (15Jo2)	55	1, 2, 3		circular pit tomb	pit		Adena	Dunnell, R.C., C&O Mounds (15Jo2) Burial Data Forms, 1977, Webb Museum, Lexington, KY, Webb and Haag 1942
C&O (15Jo9)	5	none		simple log tomb	floor		Adena	Webb and Haag 1942
C&O (15Jo9)	7	1	2	rectangular pit tomb	pit		Adena	Webb and Haag 1942
C&O (15Jo9)	8	2		simple log tomb	floor		Adena	Webb and Haag 1942

C&O (15Jo9)		3		other	log floor	137.2 sq ft	Adena	Webb and Haag 1942
C&O (15Jo9)		5		log platform tomb	floor	35 sq ft	Adena	Webb and Haag 1942
C&O (15Jo9)		7		log platform tomb	log floor	15 sq ft	Adena	Webb and Haag 1942
C&O (15Jo9)		8		log platform tomb	log floor	6.5 sq ft	Adena	Webb and Haag 1942
C&O (15Jo9)		13		log platform tomb	log floor	99.75 sq ft	Adena	Webb and Haag 1942
C&O (15Jo9)		15		simple log tomb	platform	116 sq ft	Adena	Webb and Haag 1942
Dover	4	5 and 6		simple log tomb	floor		Adena	Webb and Snow 1959; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Dover		25		simple log tomb	floor	26.27 sq ft	Adena	Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Dover	44	40, 41, 42, 43		simple log tomb	log floor		Adena	Webb and Snow 1959; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Dover	46	45 a and b		simple log tomb	floor		Adena	Webb and Snow 1959; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Dover		54		simple log tomb	floor		Adena	Webb and Snow 1959; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Dover	52	55		simple log tomb	NA		Adena	Webb and Snow 1959; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY

Ricketts	1	5, 7, 8		rectangular pit tomb	floor	17.5 sq ft	Adena	Webb and Funkerhouser 1940; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		9 and 10		simple log tomb	basin		Adena	Webb and Funkerhouser 1940; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		11		simple log tomb	floor		Adena	Webb and Funkerhouser 1940; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		12, 13, 14		simple log tomb	pit		Adena	Webb and Funkerhouser 1940; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		15 and 16		simple log tomb	basin		Adena	Webb and Funkerhouser 1940; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		17		simple log tomb	floor		Adena	Webb and Funkerhouser 1940; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		18,19,20		simple log tomb	floor		Adena	Webb and Funkerhouser 1940; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Robbins	3	3	1	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	13	41	2	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins		5, 6, 7	3	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	37	73	4	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	4	71	5	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins		42, 44	6	simple log tomb	floor		Adena	Webb and Elliot 1942

Robbins	14	43	7	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	34	64, 65, 66	9	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	12	40	11	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	6		12	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	8	18	14	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	11	36, 37, 38	15	layered log tomb	floor	7.5 sq ft	Adena	Webb and Elliot 1942
Robbins	17	47	16	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins		21, 22, 23	17	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	7	24	19	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins		25	20	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	18	48, 49	21	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	9	30	23	log platform tomb	floor	19.32 sq ft	Adena	Webb and Elliot 1942
Robbins	28	34	25	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	20	52	26	log platform tomb	floor	22.5 sq ft	Adena	Webb and Elliot 1942
Robbins	16	46	27	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	38	74, 75, 76	28	layered log tomb	floor	77 sq ft	Adena	Webb and Elliot 1942

Robbins	32	62	29	log platform tomb	log floor	6.5-8 sq ft	Adena	Webb and Elliot 1942
Robbins	33	63	30	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	15	45	31	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	35	70	32	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	19	50	33	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	27	54	34	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	31	61	36	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	36	72	43	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	41	79, 80	46	log platform tomb	floor		Adena	Webb and Elliot 1942
Robbins	43	82, 83	48	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	42	81	49	simple log tomb	floor		Adena	Webb and Elliot 1942
Robbins	44	84	51	simple log tomb	floor	21 sq ft	Adena	Webb and Elliot 1942
Cresap	15?	30		other	basin	22.42 sq ft	Adena	Dragoo 1963
Cresap	19	33		rectangular pit tomb	pit	32.37 sq ft	Adena	Dragoo 1963
Cresap	20	34		rectangular pit tomb	pit	39.78 sq ft	Adena	Dragoo 1963
Cresap	28	54		circular pit tomb	pit	50.43 sq ft	Adena	Dragoo 1963
Caldwell				other	floor	154 sq ft	Unidentifiable	Prufer 1961 and Everhart 2020

Harness			type 1	simple log tomb	platform	11 sq ft	Hopewell	Mills 1907
Harness			type 2	simple log tomb	basin	11 sq ft	Hopewell	Mills 1907
Harness			type 4	simple log tomb	floor	11 sq ft	Hopewell	Mills 1907
Mound 7 (Mound City)		3		simple log tomb	platform	32.5 sq ft	Hopewell	Brown 2012, Mills 1922
Mound 7 (Mound City)		9		layered log tomb	platform	42 sq ft	Hopewell	Brown 2012, Mills 1922
Mound 7 (Mound City)		12		layered log tomb	platform	32.5 sq ft	Hopewell	Brown 2012, Mills 1922
Mound 7 (Mound City)		13		rectangular pit tomb	pit		Hopewell	Brown 2012, Mills 1922
Metzger			25-Aug	layered log tomb	floor		Hopewell	Fowke and Moorehead 1894
Metzger			27 and 28 Aug (first, central)	layered log tomb	floor	180 sq ft	Hopewell	Fowke and Moorehead 1894
Metzger			27 and 28 Aug (second)	layered log tomb	floor	80 sq ft	Hopewell	Fowke and Moorehead 1894
Metzger			Sep 4 (final mentioned)	other	floor		Hopewell	Fowke and Moorehead 1894
Seip Mound 1		1		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#2-7		layered log tomb	platform	180 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#9		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931

Seip Mound 1		#11		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#12		simple log tomb	platform	13.55 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#13		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#14		layered log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#15		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#17		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#19		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#22		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		#23		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		26		layered log tomb	platform	15.18 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		27		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		28		simple log tomb	platform	30.24 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		32		layered log tomb	platform	15 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		36		simple log tomb	platform	9.68 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		37		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		38		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931

Seip Mound 1		39		layered log tomb	platform	3.5 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		40		simple log tomb	platform	31.5 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		41		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		42		simple log tomb	platform	18 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		43		layered log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		45		layered log tomb	platform	14 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		46		simple log tomb	platform	6.98 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		48		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		49		layered log tomb	platform	19.54 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		52		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		53		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		58		layered log tomb	platform	6.93 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		59		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		60		simple log tomb	platform	16 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		61		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		63		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931

Seip Mound 1		64		simple log tomb	platform	15.16 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		65		simple log tomb	platform	8 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		66		simple log tomb	platform	19.81 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		67		simple log tomb	platform	10.5 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		68		simple log tomb	platform	3.03 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		71		layered log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		73		layered log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		74		simple log tomb	platform	8.62 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		81		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		85		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		86		log platform tomb	platform	16.5 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		88		simple log tomb	platform	16.69 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		89		simple log tomb	platform	9.72 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		90		simple log tomb	platform	18 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 1		91		other	platform		Hopewell	Shetrone and Greenman 1931
Seip Mound 1		97		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931

Seip Mound 1		98		simple log tomb	platform	2.71 sq ft	Hopewell	Shetrone and Greenman 1931
Seip Mound 3		1		simple log tomb	platform		Hopewell	Shetrone and Greenman 1931
Hopewell Mound 23		2		simple log tomb	floor		Hopewell	Shetrone 1926
Hopewell Mound 25		10		layered log tomb	NA	26.25 sq ft	Hopewell	Shetrone 1926
Hopewell Mound 25		11		layered log tomb	platform	60 sq ft	Hopewell	Shetrone 1926
Hopewell Mound 25		12		simple log tomb	NA	31.5 sq ft	Hopewell	Shetrone 1926
Hopewell Mound 25		15		simple log tomb	platform		Hopewell	Shetrone 1926
Hopewell Mound 25		17		simple log tomb	NA		Hopewell	Shetrone 1926
Hopewell Mound 25		21		simple log tomb	NA		Hopewell	Shetrone 1926
Hopewell Mound 25		22		simple log tomb	platform		Hopewell	Shetrone 1926
Hopewell Mound 25		24		simple log tomb	NA		Hopewell	Shetrone 1926
Hopewell Mound 25		34		simple log tomb	platform		Hopewell	Shetrone 1926

Hopewell Mound 25		35		simple log tomb	platform		Hopewell	Shetrone 1926
Hopewell Mound 25		38		simple log tomb	platform	5.5 sq ft	Hopewell	Shetrone 1926
Hopewell Mound 25		39		simple log tomb	platform	7.5 sq ft	Hopewell	Shetrone 1926
Hopewell Mound 25		41		simple log tomb	platform	48.75 sq ft	Hopewell	Shetrone 1926
Hopewell Mound 25		43		simple log tomb	platform		Hopewell	Shetrone 1926
Hopewell Mound 26		1		simple log tomb	NA		Hopewell	Shetrone 1926
Hopewell Mound 26		3		simple log tomb	NA		Hopewell	Shetrone 1926
Hopewell Mound 26		6		simple log tomb	NA		Hopewell	Shetrone 1926
West			7	simple log tomb	floor	38.72 sq ft	Hopewell	Porter and McBeth 1958
West			8	rectangular pit tomb	pit	60 sq ft	Hopewell	Porter and McBeth 1958
West			9	simple log tomb	floor	21 sq ft	Hopewell	Porter and McBeth 1958
West			10	layered log tomb	pit	25.83 sq ft	Hopewell	Porter and McBeth 1958

Appendix C: Log Tomb Typology

Mound	Feature	Burial/ Skeleton	Tomb	Construction Materials	Orientation of logs	Size of tomb	Shape	Position within mound	Demographics	Covering	Floor	Artifacts	Reference
Coon			Only one	Logs, bark, clay, gravel	67 vertical logs (diameter: 5-8 in for vertical post-molds) surrounded by horizontal	15' x 12'8"	rectangular pit, logs at ground level wider than box tomb	60 inches below ground level	adult male	logs, skeleton covered with bark	Heavy gravel and reddish clay, layer of bark	copper bracelets,disc-shaped shell beads	Greenman 1932: 375-387
Adena		1 and 2		Logs	Laid horizontally(L = 8-9ft and d= 6-12 in), one on top of another to the height of 2.5'				2 individuals	Logs		slate gorget, clay tube pipe	Mills 1902: 460-462
Adena		4		Logs, bark	horizontal logs (d=10in)				single individual, body buried somewhere else and moved to this mound	Bark		200 beads of bone and shell	Mills 1902: 462-464
Adena		8		Logs, bark, gravel		L= 8'9" W= 5'8" h= 2'9"		on base of the mound	one child	bark?	fine, firmly packed gravel and a layer of bark	2 necklaces with shell and bone beads	Mills 1902: 465-466
Adena		9 and 10		Logs	logs placed horizontally and diagonally, at an angle of 35 degrees (d= 15-16 in for walls)				2 adults	Logs (d= 6-12 in for roof)		bone beads	Mills 1902: 466-467
Adena		11		Logs		L= 8' W=4' h= 1'6"			single individual	logs?		necklace of bone beads	Mills 1902: 467
Adena		12		Logs, bark	horizontal (varying in diameter but the largest at the bottom, 10.5')	L= 12' W= 7' h= 2'6"			single individual		bark	Necklace with small ocean shell beads and bracelet with beads from the leg bone of deer and elk	Mills 1902: 467

Adena		15 and 16		Logs, small tree limbs, brush					2 individuals? one under the other (superimposed) ?	logs with brush and small tree limbs	logs, small tree limbs, and brush	flint knives, sandstone tablet, beaver teeth, comb made of elk bone, awls made of elk or deer bone, ear ornaments made of mountain lion teeth, animal remains	Mills 1902: 468-472
Adena		14		logs, stone slabs	stone slab heading and footing, horizontal lying logs (d= 3-9 in)				single individual			8 copper bracelets, some covered in cloth. String of beads. Broken pieces of diorite	Mills 1902: 468
Adena		17		logs of varying size	2 very large logs placed beside the body, covered by smaller logs				single individual	small logs		bracelet with bear claws	Mills 1902: 473
Adena		21		logs of varying size, bark	2 large logs (d=12-17in) placed 8 ft apart, covered by smaller logs (d=3-7 in), brush placed between larger logs and smaller poles				single individual		bark	shell beads, fresh-water pearl beads, bone beads, shell ornament (effigy of a racoon), deer antler spear points, chalcedony knives, clay effigy pipe	Mills 1902: 474-475
Crigler	3	11, 12, and 13	5	logs, bark	built over a burned house or "dais," logs lie horizontal, one log on each side, lying horizontally lined with bark	11 x 6 ft	rectangle (log box)	at ground level	3 individuals, 11 placed at center, 12 and 13 cremated	logs? used as the West wall of tomb 6	bark	flint projectile points, copper bead bracelets, mica headband, textiles	Snow, Charles E., Crigler Mound (15Be20) Burial and Feature Data Forms, 1940-1942, OHC, Columbus, OH

Crigler	4	9 and 10	6	Logs, bark, puddled clay, materials from tomb 5	horizontal with (2) small postholes, shared west wall with tomb 5, east wall has no logs	11.25 x 5.75 ft	rectangle	at ground level	2 individuals, both extended	yes, logs?, individuals covered with bark	bark, puddled clay on top of the bark, seemed as though individuals were embedded into the clay between bark layers	none	Snow, Charles E., Crigler Mound (15Be20) Burial and Feature Data Forms, 1940-1942, OHC, Columbus, OH
Toepfner	1	4, 5, 6		logs, bark, clay	horizontal logs	5' in height		1' of earth between features 1, 2, and 3	burials 1, 4, 5, and 6 extended, burial 2 skull, burial 3 cremation	log roof, ran parallel to long axis	clay floor	none	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH: 2-3
Toepfner	2	7 and 8		logs, bark	horizontal logs	8.5 x 6 ft		below feature 1, 1' of earth between features 1, 2, and 3, center of central area	adult, worked human skull associated with the burial, burial 7: 5'5", burial 8: 5'5"	log roof of 14 logs extended E-W (.4-.5' in diameter)	bark	stemmed projectile point, chert blades, piece of sandstone, worked swan bone, worked rabbit bone	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH: 3
Toepfner	3	9 and 16		logs	horizontal logs	9 feet? (p. 3)		1' of earth between features 1, 2, and 3, 5.75' above floor	burial 9 cremated (at least one immature individual) and deposited after being burned elsewhere, burial 16 an infant in the NW corner		logs	none	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County,

													OHC, Columbus, OH: 3
Toepfner	4	10, 11, and 12		logs on south end (lying E-W) had a diameter of 1'	horizontal logs	6 x 6.5 ft		immediately about feature 8, same level as features 2 and 3, 5.9' above the floor, on the east side is slightly above feature 3	3 burials- 11 is 4.9', 12 is 5.3', and 10 is 4.8'	charred log roof, lying N-S of 5-6 inches diameter, bodies covered with a mat of woven bast fibers, individually wrapped in fabric	12 logs	pieces of limestone, fabric	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH: 3-4
Toepfner	5	13, 14, 15b		logs, sticks, reed-like grass		6.5 x 7.6 feet		constructed on slope west side 5.05' above floor and east side 6.05' above floor, west of feature 3	burial 13 was placed on burial 14 (l= 5'5"), 15 laid beside and was 5'7" long	10 logs laid the length of the tomb (d= .4-.5'), N-S, north end of tomb uncovered, small sticks (d= .1-.3') laid on top and between roof logs, reed-like grass seen protruding between gaps between logs of about .1-.3', remains covered with fabric	reed grass covering the log floor (burnt and preserved)	fabric	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH: 4-5
Toepfner	6	18 and 19		logs, bark, yellow clay	one log high, horizontally laying with pairs of logs side by side, not burned like other Toepfner graves	outside dimension: 8.4 x 6.9 ft		4.8' above floor	burial 18 and 19: length of 5.3-5.6		yellow clay covered in bark and fabric	fire cracked rock, fabric	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin

													County, OHC, Columbus, OH: 5-7
Toepfner	7	25 and 26		logs, bark	western side burned by feature 6	7.2 x 6.5 ft (N-S)		4.4' above floor, east of feature 6	25: adult female, 26: cremated	covered with 12 logs, .4' apart (N-S) (d=.2-.55'), bark placed over the roof evidence on the Eastern side, burials covered in bark	burials placed on bark	none	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH: 5, 7
Toepfner	9	31, 32, 40		logs, bark			pit-like tomb		inhumations, fragments of bones		bark	none	Baby, Raymond S., Original Field Notes, 1949-1954, Notes Compiled by Raymond S. Baby on Toepfner Mound, Franklin County, OHC, Columbus, OH: 10-11
Wright	5	1		logs, bark, clay, burned limestone	4 logs, laying horizontally (log-box)		log-box	associated in time with the quaternary mound, disturbed by tertiary mound	single individual		placed on the hard clay of the mound fill and covered with soil containing ash and burned limestone	2 copper bracelets, sandstone whetstone, disk-shell beads, portions of coach shell, mica crescent	Webb 1940: 23
Wright	8	2		logs, bark, clay	5 huge logs on each side forming a horizontal platform, 4 vertical post molds one at each corner	12 sq ft	log-platform tomb		single individual (designed to accommodate 2 bodies)	by bark overlaid with small logs or poles	clay base covered with bark	Lower portion of the skeleton covered with red ochre, 2 copper bracelets, scraps of cut mica sheet	Webb 1940: 24-25

Wright	10	6(7)		short logs, clay	short logs laying horizontally lining the wall (held in place by plastic clay)	7 ft in diameter	circular pit tomb		2 burials, burial 7 appeared to be a trophy skull	logs and poles	nearly flat on the bottom	2 copper bracelets, a sandstone cylinder, and disk-shell beads	Webb 1940: 27
Wright	15	3		logs, bark	one log high, horizontally laying, short logs for foot and head rest	8 x 4.5 ft	log-box tomb		single individual	slabs of bark	large slabs of bark	shell-disk beads	Webb 1940: 29
Wright	16	5		logs, bark, clay	horizontal logs (held in position by plastic clay and piled earth on the outside)	6 logs high	rectangular pit tomb	cut into the primary mound	single individual	smaller logs laying parallel held up by 6 vertical posts	platform of clay overlaid with bark	copper bracelet, shell-disk beads	Webb 1940: 29-31
Wright	17	8		logs, bark, puddled clay	log box at base of oval pit, horizontal logs, one on each side, logs lined with bark, gap of about 0.8 ft between side logs and logs at the head and feet, this gap contained 3 vertical posts at each end	oval pit: 6 x 11.5 ft, base: 4 x 9.6 ft	log-box tomb	cut from tertiary mound into the west side of secondary	single individual	possible canopy, cross strips of bark, covered with puddled clay		2 tublar pipes, 2 bone combs	Webb 1940: 31-32
Wright	18	(9)11		logs, bark, puddled clay	2 horizontal logs at each end and side, short log under the head and lower legs, burial 9 did not have a log tomb but intruded into burial 11 and was buried on and covered with puddled clay		log-platform tomb	intruded into the top of the primary mound	burial 11 extended, burial 9 an intrusion	body covered by bark and then puddled clay	bark strips over puddled clay	2 copper bracelets, shell-disk beads, snake skeleton	Webb 1940: 32-35
Wright	19	13		logs, bark, clay	walls faced with logs up to mouth of pit, extended at the mouth of the pit by 3 or 4 logs, log box at base of pit, 2 short logs one at head and	5.5 ft deep	rectangular pit tomb (just above feature 20)	east side of primary mound, cut with sloping walls	single individual	body covered with bark	prepared clay floor and bark placed longitudinally	deposits of red ochre, shell-disk beads	Webb 1940: 37

					feet, 2 long one on each on side								
Wright	20	14		logs, puddled clay	logs horizontal, 3 at head and 3 at foot, log head and foot rest, inside was covered with plastic clay		log-box tomb	immediatel y under feature 19		puddled clay covered the body to a depth of 0.4 ft		Copper bracelet, disk-shell beads	Webb 1940: 38-39
Wright	21	15		logs, bark, clay, yellow clay	large logs set in the wall at the mouth of the pit, filled with tough yellow clay, 3 large logs at the head parallel to the pit wall, 2 at the feet, sides of the burial platform covered in bark	Pit: 8ft deep, burial area: 9 sq ft, floor: 4 x 6 ft	rectangular pit tomb	intruded into the top of the primary mound	single individual		hard clay	2 copper bracelets, a tubular pipe, shell-disk beads	Webb 1940: 39-40
Wright	22	(20)21		logs, bark	large logs placed on top of one another to wall up the sides of the pit, 3 logs on the NE (head of the grave), SE, and SW walls, 6 smaller logs on NE wall, SE wall had many bark strips parallel to the wall, 4 logs (d= 1ft, L= 9ft) laid horizontally within the pit in a square along the pit walls, vertical post molds: 4 NE and SW, 6 NW, 5 SE, 4 small logs (horizontal) in a rectangle about the body	17 x 15 ft, 5 ft deep	(rectangular) pit tomb			bark strips over body/ inner rectangular tomb, possible canopy based on post molds	bark slabs, bottom of pit intruded by 0.5 ft into midden	Marginella-shell beads, copper bracelet, disk-shell beads	Webb 1940: 40-41

Wright	23	17		Logs (dead trees without bark and hackberry with bark), bark, clay, plastic clay	Log platform in a pit lined with 5 layers of bark and clay (~ 0.4 ft thick), Platform: all logs laid horizontally , 5 logs NE, 3 NW, 2 SW, 3 SE, center of platform: 3 logs laid about burial 17 (4 x 6.5 ft), 3 vertical post molds at the head and feet of individual		log-platform tomb		single individual	layer of bark and 3 in thick layer of clay over the burial, possible structure over the grave based on vertical post molds	Heavy plastic clay base with bark	2 copper bracelets, shell-disk beads, copper crescent of sheet metal, infant skeleton	Webb 1940: 42-43
Wright	24	18		logs, bark, clay	walls lined with logs and bark (N, W, and S), short log under head and feet, 4 vertical posts (one at each corner, L= 6.5 ft, 2.7 ft at feet, 3.2 ft at head)	5.8 ft below mouth of pit, rectangle 8.7 x 7.2 ft	rectangular pit tomb	west slope of the primary mound	single individual	bark over the body	clay base covered with bark	4 copper bracelets, remains of woven textile, snake skeleton	Webb 1940: 44-46
Wright	26	16		logs, bark, clay	horizontal, 4 logs	5 x 7 ft	log-box tomb	dug into secondary mound	single individual	filled with clay, no bark	clay base covered with bark	none	Webb 1940: 48
Overly			1* (first in field notes)	logs, bark, clay	logs placed around the body	4 x 7 ft		near the center of the mound, 4 feet above the base of the mound	female of about 30 years	wrapped in woven fabric and bark, tied with strips of bark	prepared clay floor	woven bark, woven fabric, shell beads	Mills, William, Original Record Book, 1911, Mills' Record Book, OHC, Columbus, OH: 9-11
Overly			2* (second in field notes)	logs, bark	4 vertical posts (one in each corner, 18" to 2'), logs surrounding the grave about 10+ inches in diameter			near the exact center of the mound, 18 inches above the base of the mound	male	wrapped in bark		coffin-shaped slate gorget, chalcedony spear points	Mills, William, Original Record Book, 1911, Mills' Record Book, OHC, Columbus, OH: 11-16

C&O (15Jo2)	55	1, 2, 3		logs, bark	a circular pit was dug down into the hard-pan, then lined with bark and then logs in a horizontal direction		circular burial pit	extends down into the hard-pan	3 children		bark-lined	copper bracelets, flints, arrow point, copper bracelets covered with bark and vine	Dunnell, R.C., C&O Mounds (15Jo2) Burial Data Forms, 1977, Webb Museum, Lexington, KY; Webb and Haag 1942: 305
C&O (15Jo9)	5	none		logs, bark	length of the tomb ran E-W, lined with bark	15 ft long	rectangle	center of the mound, 3.8 ft below the surface	no remains			copper bracelets, black flint projectile points, textiles	Webb and Haag 1942: 318-320
C&O (15Jo9)	7	1	2	logs	pit 3 feet deep lined with logs, less logs on eastern wall	3 ft deep	burial pit	16.5 ft deep, 3 ft NE of feature 8	extended, but disturbed			none	Webb and Haag 1942: 321
C&O (15Jo9)	8	2		logs, clay	logs lay horizontally, length roughly E-W, not all of the logs used were straight		log rectangle but utilizes curved logs	9 ft below stake 40R10	cremation			flint projectile points	Webb and Haag 1942: 321-322
C&O (15Jo9)		3		logs, bark, gray clay, clay, ochre	logs placed in a terrace fashion, 5 logs on the NE and SE sides, 6 or more on the NW side	14 x 9.8 ft, interior depth of 3 ft	logs placed in a terrace fashion	19 ft below stake 70R12	extended	gray clay over the body, clay dome on the NW end that was covered by 4 layers of bark and then logs laid across	6 logs laid parallel, orange pigment (ochre) in the soil from the hips to the ankles	ochre, flint flake, potsherd	Webb and Haag 1942: 323
C&O (15Jo9)		5		logs	2 logs forming the length of tomb, 7 short logs make the ends of the tomb	5 x 7 ft	log platform	humus zone	cremation			flint projectile point and pieces of pottery	Webb and Haag 1942: 325
C&O (15Jo9)		7		logs	8 logs laying parallel, cremation lay under and between logs	3 x 5 ft			cremation		8 small logs laying parallel	flint fragments and potsherds	Webb and Haag 1942: 325
C&O (15Jo9)		8		logs	5 logs about 5ft long laid parallel to each other about one foot apart, one log on each end	platform about 6.5 ft square	log platform		cremation		log platform	projectile points, fragments of worked bone, groved sandstone	Webb and Haag 1942: 325-326

					about 6.5 ft long							tablet, flint chips	
C&O (15Jo9)		13		logs, clay	covered with a log platform, 18 logs abou 8 ft long lay parallel to cover an area 11.5 ft wide NE-SW, 2 more logs lay on the SW end	platform 10.5 x 9.5 ft	log platform		cremation		log platform on top of clay	projectile points, flint chips, burned rocks, potsherds, copper bracelets	Webb and Haag 1942: 326
C&O (15Jo9)		15		logs, puddled clay	log rectangle constructed on top of clay platform, double line of logs on all four sides	10 x 11.6 ft	log rectangle on top of clay platform		cremation, at least two individuals		puddled clay platform	projectile points, flint chips, bone beads, shell, potsherds	Webb and Haag 1942: 326-327
Dover	4	5 and 6		logs, white clay	horizontal lying logs about the cremations	length= 6.6 ft			at least 4 individuals cremated, 2 adult males and 2 children	domed with hard white clay	clay covering what was possible a fireplace	bobcat bones, disk and globular shell beads, cut polished bone cylinders, and animal bone	Webb and Snow 1959: 17; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Dover		25		logs, bark, blue clay	4 small logs frame the body	3.7 x 7.1 ft			single individual, possibly male	blue clay and bark layer	lies on bark layer (of feature 17)	none	Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Dover	44	40, 41, 42, 43		logs, bark					3 males about late 20s and one female about 13 years old	heavy bark and a layer of earth (9-12 inches thick)	small logs covered by a heavy bark layer	red ochre, shell beads	Webb and Snow 1959: 22-23; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum,

													Lexington, KY
Dover	46	45 a and b		logs, bark, sandy loam	in large log tomb			base of the mound	2 children	heavy layer of bark covered by sandy loam	layer of bark placed on the old village floor	copper bracelets, copper beads	Webb and Snow 1959: 23-24; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Dover		54		logs, bark	in log tomb	l= 5.5 ft		3 ft above the base of the mound	woman in late 20s	bark	bark	red ocher, disk shell beads	Webb and Snow 1959: 26; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Dover	52	55		logs	log rectangle				cremation			disk shell beads	Webb and Snow 1959: 26; Webb, William S., Dover Mound Burial and Feature Data Forms, 1950, Webb Museum, Lexington, KY
Ricketts	1	5, 7, 8		logs, bark, puddled clay, flat rock slab (possibly used to hold logs in place)	single log on three sides and five logs on fourth side (the north side) laid horizontally one ontop of another, the long axis runs E-W, bark encasing the logs	5 feet deep, 7 x 2.5 ft, diameter about 5 inches	rectangular pit		one adult female and one infant, one cremation	covered with bark and then puddled clay	placed on floor of tomb, no preparation	pearl earring, copper spiral ring, shell beads, copper beads	Webb and Funkerhouser 1940: 215-217; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY

Ricketts		9 and 10		logs, bark, puddled clay	single log on each of three sides of a rectangle		simple log tomb (missing log on one side)		two individuals, remains of 10 (adult) scattered about the head of 9 (child)	burial 9 covered in bark	shallow basin of puddled clay, lined with bark	carved mussel shell	Webb and Funkerhouser 1940: 217-218; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		11		logs, bark, puddled clay	single log on each of three sides of a rectangle		simple log tomb (missing log on one side)		single individual, male	body covered by bark, entire tomb covered by puddled clay	lined with bark	none	Webb and Funkerhouser 1940: 218; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		12, 13, 14		logs, bark, puddled clay	pit lined in bark, single log on each of three sides of a rectangle, two individuals side by side, heads at same end, log missing at foot		simple log tomb (missing log on one side)		13 was a male (Cache of artifacts by skeleton), 14 a female, the remains of 12 were scattered over the other bodies	puddled clay followed by bark	lined with bark	carved shells, sandstone elbow pipe, red ochre, bone tools, bone chisels, bone combs, deer scapula awl, shell spoons, shell beads, flint point (stemmed and stemless)	Webb and Funkerhouser 1940: 218-219; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		15 and 16		logs, clay	a single log on each of the three sides of a rectangle, containing a double burial, superimposed, reversed		simple log tomb (missing log on one side)		two individuals	clay	clay basin	none	Webb and Funkerhouser 1940: 219; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Ricketts		17		logs, bark	single log on each of the long sides, two logs side by side at foot end, logs absent at the head end, lined with bark			immediately below burials 9 and 10	single individual	bark	bark	bone combs, arrow point, bone awls, shell spoon, terrapin shell spoons, bone drift, copper finger ring	Webb and Funkerhouser 1940: 219; 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum,

													Lexington, KY
Ricketts		18,19,20		logs, bark	a single log on each of the three sides of a rectangle and containing a double burial, superimposed, heads at same end, log missing at foot end		open rectangle		two individuals, 19 lay on top of 20, remains of 18 scattered about the grave	bark	bark	flint celt, tubular stone pipe, flint points, copper bracelet	Webb and Funkerhouser 1940, 15Mm3 Ricketts Site Burial and Feature Data Form, Webb Museum, Lexington, KY
Robbins	3	3	1	logs, bark, earth	placement of framework of logs, bark, and burial with subsequent construction of earthen wall around them, 2 logs on each side			12.6 ft below the surface	adult male	cross logs, bark, and earth, rafter molds	bark		Webb and Elliot 1942: 387, 414, 417
Robbins	13	41	2	logs, bark, earth	placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, one log on each side			10.6 ft below the surface	adult male	cross logs, bark, and earth	bark		Webb and Elliot 1942: 387, 414, 418
Robbins		5, 6, 7	3	logs, bark, earth	disturbed and fragmentary burial in log tomb, placement of logs, bark, and burial within a accidental cavity from the collapse of the earth roof of tomb 1, inner surfaces reshaped to form the new tomb			8-10 ft below the surface	2 adult males, 1 unidentified adult	cross logs and earth	bark		Webb and Elliot 1942: 387, 414, 417

Robbins	37	73	4	logs, bark, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 2 logs on each side			12.5 ft below the surface	female juvenile	cross logs, bark, and earth	bark		Webb and Elliot 1942: 387, 414, 419
Robbins	4	71	5	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 1 log at feet, 2 on the other sides			9.9 ft below surface	adult male	cross logs, bark, and earth, rafter molds	puddled clay and bark layer	ochre	Webb and Elliot 1942: 387, 393, 414, 419
Robbins		42, 44	6	logs, bark, earth	disturbed and fragmentary burial in log tomb, placement of logs, bark, and burial within a accidental cavity from the collapse of the earth roof, inner surfaces reshaped to form the new tomb					cross logs, bark, and earth			Webb and Elliot 1942: 387, 414
Robbins	14	43	7	logs, bark, earth	disturbed and fragmentary burial in log tomb, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth			4.9ft below surface	adult female	cross logs, bark, and earth	bark		Webb and Elliot 1942: 387, 414, 418

					wall, one log on the right side and one at the head								
Robbins	34	64, 65, 66	9	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, one log on the right, two on all other sides			~9.5 ft below surface	2 male adults, one infant	cross logs, bark, and earth, rafter molds	puddled clay with bark layer		Webb and Elliot 1942: 387, 414, 419
Robbins	12	40	11	logs, bark, earth	placement of framework of logs, bark, and burial with subsequent construction of earthen wall around them, 2 logs on each side			10.6 ft below the surface	adult, possibly male	cross logs, bark, and earth	bark		Webb and Elliot 1942: 387, 414, 418
Robbins	6		12	logs, earth	placement of logs and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, one log at the head and on the right side					cross logs and earth			Webb and Elliot 1942: 387, 414
Robbins	8	18	14	logs, bark, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial within a accidental cavity from the collapse of the earth roof, inner surfaces reshaped to form the new			7.7 ft below surface	adult male	cross logs and earth	bark	copper bracelets	Webb and Elliot 1942: 387, 414, 417

					tomb, 2 logs at the head and on the right side								
Robbins	11	36, 37, 38	15	logs, bark, puddled clay, earth	disturbed and fragmentary burial in log tomb, 2 logs on each of the 4 sides, logs length of 7.5 feet and width from .9-1.2 ft, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 2 logs on each side	7.5 ft square, d= 1ft	rectangle, double tomb	11.4-13.2 ft below surface	2 extended burials(36 and 37) and one trophy skull (38), all male	bark covering, layer of puddled grey-yellow clay to top of log-molds, cross logs, and earth, rafter molds	bark layer over puddled clay		Webb and Elliot 1942: 387, 397-399, 414, 418
Robbins	17	47	16	logs, bark, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, two logs at sides, one log at head and foot		log burial platform	8.9 ft below surface	adult male	cross logs, bark, and earth	bark	copper bracelets, shell beads, textiles	Webb and Elliot 1942: 387, 414, 418
Robbins		21, 22, 23	17	logs, bark, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, one log on the right side			5.5-6.1 ft below surface	3 adults, one male , two possibly male (one only a skull)	cross logs and earth	bark	copper bracelets	Webb and Elliot 1942: 387, 414, 417-418

Robbins	7	24	19	logs, bark, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, one log on right and left side			8.1 ft below surface	adult female	cross logs, bark, and earth	bark		Webb and Elliot 1942: 387, 414, 418
Robbins		25	20	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, one log on the right side			7.9 ft below surface	female child	cross logs and earth	puddled clay with bark layer	shell beads, ochre	Webb and Elliot 1942: 387, 414, 418
Robbins	18	48, 49	21	logs, bark, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 3 logs on right and left sides, one at head and feet		log burial platform	8.5-9.5 ft below surface	2 adult males	cross logs, bark, and earth	bark		Webb and Elliot 1942: 387, 414, 418
Robbins	9	30	23	logs, bark, earth	placement of framework of logs, bark, and burial with subsequent construction of earthen wall around them, 2 logs on right and left side,	6.9 x 2.8 ft, d= 1.7ft		10.1 ft below surface	adult male	cross logs, bark, and earth	bark	ochre	Webb and Elliot 1942: 387, 414, 418

					one at head and feet								
Robbins	28	34	25	logs, bark, earth	extended burial in earthen tomb with bark and logs, place of logs, bark, and burial on a shelf cut into the mound slope, intrusive digging, one log on the right, one at the feet			cut into the slope of the mound, 8.2 ft below surface	adult male	bark	bark		Webb and Elliot 1942: 387, 414, 418
Robbins	20	52	26	logs, bark, earth	disturbed and fragmentary burial in log tomb, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, one log on the right side, 2 on all other sides	7.5 x 3 ft, d=1.5ft		12.6 ft below surface	adult female	cross logs, bark, earth	bark		Webb and Elliot 1942: 387, 401, 414, 419
Robbins	16	46	27	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, one log on right and left side, two logs at head and feet			9.2 ft below surface	adult female	cross logs, bark, earth	puddled clay with bark layer		Webb and Elliot 1942: 387, 414, 418

Robbins	38	74, 75, 76	28	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 2 logs on each side built up on each side	d= 2.5ft, 11 x 7ft		17.7-18.2 ft below surface	3 adults, 1 female and 2 males	cross logs, bark, and earth, rafter molds	puddled clay with bark layer		Webb and Elliot 1942: 387, 406, 414, 419
Robbins	32	62	29	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 3 on right side, 2 on all other sides	6.5-8ft square, h=1.3ft	log burial platform	12.8 ft below surface	female juvenile	cross logs, bark, earth	puddled clay, 7 cross logs with bark layer	copper bracelets, shell beads, projectiles points, textile	Webb and Elliot 1942: 387, 403-404, 414, 419
Robbins	33	63	30	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 1 log on each side			13.7 ft below surface	adult female	cross logs, bark, earth	puddled clay with bark layer	shell beads, fragments of graphite	Webb and Elliot 1942: 387, 414, 419
Robbins	15	45	31	logs, bark, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth			7.5 ft below surface	infant	cross logs and earth	bark		Webb and Elliot 1942: 387, 414, 418

					wall, 1 log on right side								
Robbins	35	70	32	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 1 log at right side and feet, 2 logs at head and on left side			13.7 ft below surface	adult female	cross logs, bark, earth	puddled clay with bark layer		Webb and Elliot 1942: 387, 414, 419
Robbins	19	50	33	logs, bark, earth	placement of framework of logs, bark, and burial with subsequent construction of earthen wall around them, 1 log on right and at head, 4 logs on left side, 2 logs at feet			10.1 ft below surface	adult male	cross logs, bark, earth	bark		Webb and Elliot 1942: 387, 414, 419
Robbins	27	54	34	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 1 log on the right side			12.8 ft below surface	adult male	cross logs, bark, earth	puddled clay with bark layer		Webb and Elliot 1942: 387, 414, 419
Robbins	31	61	36	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an			11 ft below surface	adult male	cross logs, bark, earth	puddled clay with bark layer		Webb and Elliot 1942: 387, 414, 419

					intentionally constructed encircling earth wall, 1 log at feet, 2 on the other sides								
Robbins	36	72	43	logs, bark, puddled clay, earth	extended burial in earthen tomb with bark and logs, placement of logs, bark, and burial fitted exactly within the cavity of an intentionally constructed encircling earth wall, 2 logs at feet, 1 on all other sides		log burial platform	13.6 ft below surface	adult male	cross logs, bark, earth	puddled clay with bark layer	ochre	Webb and Elliot 1942: 387, 414, 419
Robbins	41	79, 80	46	logs, bark, puddled clay, earth	disturbed and fragmentary burial in log tomb, placement of framework of logs, bark, and burial with subsequent construction of earthen wall around them, 2 on all sides			13.9 ft below surface	2 adults, one male, other unidentifiable	cross logs, bark, earth	puddled clay with bark layer	potsherds	Webb and Elliot 1942: 387, 414, 420
Robbins	43	82, 83	48	logs, bark, earth	disturbed and fragmentary burial in log tomb, placement of logs, bark, and burial within a accidental cavity from the collapse of the earth roof, inner surfaces reshaped to form the new tomb, 1 log on the right side			10.6-10.7 ft below surface	2 adults, one female, other a skull (sex unidentifiable)	cross logs, bark, earth	bark	flint blank, limestone, flint projectile points, graphite	Webb and Elliot 1942: 387, 415, 420, 437

Robbins	42	81	49	logs, bark, earth	placement of framework of logs, bark, and burial with subsequent construction of earthen wall around them, one log at right side and head			16.4 ft	adult	cross logs, bark, earth	bark		Webb and Elliot 1942: 387, 415, 420
Robbins	44	84	51	logs, bark, puddled clay, earth	placement of framework of logs, bark, and burial with subsequent construction of earthen wall around them, 1 log on each side	7 x 3ft		18.9 ft below the surface	adult male cremation	cross logs, bark, earth	puddled clay with bark layer	fragment of sandstone bar	Webb and Elliot 1942: 387, 410-412, 415, 420, 422, 437
Cresap	15?	30		logs, bark, clay	10 logs covered, clay lined basin	5.9 x 3.8 ft, d= 0.4 ft		0.2- 0.6 ft above mound floor	crushed and decayed skull	logs	clay basin, bark lined	celt, leaf-shaped blade, copper reel-shaped gorget, strip of bone, woven basket, yellow ochre, red ochre, grooved tablet, stemmed blade, worked and faceted pieces of hematite, blade tip, end scraper, pitted stone	Dragoo 1963: 34-36, 62
Cresap	19	33		logs, bark, clay, organic material	bark and log covered subfloor pit, surrounded by a raised clay platform, pit lined with an organic material	8.3 x 3.9ft, d= 0.8 ft	rectanguloid subfloor pit	0.6- 0.8 ft below the mound floor	female	strips of bark held up by small logs, covered by W primary mound	clay, lined with an organic material	igneous stone celt, red ocher	Dragoo 1963: 38-41, 63

Cresap	20	34		logs, bark, clay	bark and log covered subfloor tomb	7.8 x 5.1 ft, d= 0.9ft	subfloor tomb, rectanguloid shaped pit	0.7-0.9 ft below mound floor	adult	layer of bark over small logs, then a small mound that was an extension of the W primary mound	clay lined	woven mats, stone sphere, hematite celt, igneous stone celts, hematite hemisphere, barite hemisphere, grooved tablets, engraved banded slate pendants, scrpar, drills, mangonese dioxide deposit, red ocher, stemmed blade, flint flakes, yellow ocher	Dragoo 1963: 41-42, 63
Cresap	28	54		logs, bark, clay, gravel	log and bark covered oval-shaped subfloor pit, dug through the mound floor, clay bench surrounding E side, bark lined	8.2 x 6.15 ft, d=3.3ft	oval-shaped subfloor pit	3.3 ft below mound floor	adult male	small logs then covered by bark, then a small earth mound	loose gravel, bark	turtle carapace cups, mussel shells, worked flint, graphite, bone awls, stemmed blades, deer scapula awl, worked bone, ball of burned clay, pieces of burned shale, turtle shell, antler awl, celt, organic material, mudstone tablet, river stone, flint scrapers, red ocher, worked hematite, disks and tubluar conch shell beads, marginella shell beads, conch shell heads	Dragoo 1963: 47-51, 67

Caldwell		1		logs	specialized log pen, consisting of two logs of estimated fourteen inches in diameter, side by side, sunk into the surface about three inches, with another log on top of the two. These logs did not have overlap at the corners but just not on the inside of the corners. On the inside of each corner was a posthole and opposite this on the outside of the logs at the side and end was another posthole, these posts served to hold the log crib in place	~14 x 11ft	log pen, logs stacked	centered on the floor of the mound	adult			copper headplate, woven fabric, leather, mice crescents, copper beads, red ochre	Prufer 1961: 213; Everhart 2020: 11-13
Harness			type 1	logs, puddled clay	small logs averaging a diameter of 3-6 inches, making a parallelogram or square	approx 4 x 2.5-3 ft, usually made the exact size of the grave	clay platform, parallelogram of logs	base of the mound			elevated (typically puddled) clay platform, higher at the center and logs plastered with further clay	NA	Mills 1907: 31
Harness			type 2	logs, puddled clay	small logs averaging a diameter of 3-6 inches, making a parallelogram or square	approx 4 x 2.5-3 ft, usually made the exact size of the grave	clay basin, parallelogram of logs				clay basin about 2-4 inches deep	NA	Mills 1907: 31
Harness			type 4	logs, clay	small logs averaging a diameter of 3-6 inches, making a parallelogram or square	approx 4 x 2.5-3 ft, usually made the exact size of the grave	log parallelogram	various portions of the mound			log tomb plastered in clay before the grave was prepared	NA	Mills 1907: 32

Mound 7 (Mound City)		3		logs, loam-fill, clay	composed of a single layer of logs, about 8 inches in diameter	6.5 x 5 ft	single layer simple tomb (cribwork platform)	upper structure	cremation	loam-fill that rose to 5 inches above the logs, then covered by a small mound	clay platform	obsidian spear, copper button ornament, pearl and shell beads	Brown 2012: 75; Mills 1922: 420
Mound 7 (Mound City)		9		logs, clay	clay platform was 6 inches above the cribwork which was composed of two layers of logs with a diameter of about 8 inches, surrounded by a circle of postmolds	platform: 7 x 6 ft	2 layer rectangle, large cribwork supported platform	upper structure	cremation	covered by a primary mound	clay platform	copper toadstool wand, copper plate, headdress of copper horns, fabric, skin and fur, copper falcon cutout plate, matting copper pendants, quartz biface fragments, pearl and shell beads, mica sheets	Brown 2012: 76; Mills 1922: 423-425
Mound 7 (Mound City)		12		logs, clay	double layer of logs composing the cribwork, clay platform rose above the logs at the center, posts encircling the platform	6.5 x 5 ft	2 layer rectangle, platform supported by cribwork	upper structure	cremation		clay platform	large copper plate, copper and silver earspools, leather, leather belt, copper turtle effigy rattles, obsidian bifaces, copper reel-shaped gorgets, copper bat effigy, repousse hawk cutout, ovate copper pendants with shell and pearl beads, circular sheet of mica, copper mountain goat effigy cutout sagittal headdress	Brown 2012: 76-77, Mills 1922: 426-429

Mound 7 (Mound City)		13		logs, clay	the sides of the pit were braced with 9-10 inch diameter logs, small clay platform (4 inches high)		rectangular pit, "intaglio" cribwork burial	9 inches below the upper structure floor	cremation		clay floor	copper ax, sheets of mica, quartz biface fragments, bone needles, shell beads, skull mask, Busycon sp. (snail) Shell cups	Brown 2012: 77; Mills 1922: 429-430
Metzger			25-Aug	oak and walnut logs	logs 2-4 ft in length, laid one above the other to about 1 foot high			8 feet north of center	single individual				Fowke and Moorehead 1894: 315
Metzger			27 and 28 Aug (first, central)	logs, yellow clay	constructed of small logs lying horizontally	largest tomb of the mound, 12 x 15ft, 4 ft high		center of the mound	single individual		on top of the yellow clay floor of mound	pieces of red pottery	Fowke and Moorehead 1894: 315-318
Metzger			27 and 28 Aug (second)	logs		8 x 10ft, 6 ft high		NW of the center	single individual				Fowke and Moorehead 1894: 315-318
Metzger			Sep 4 (final mentioned)	logs	skeleton immediately below large log, the saplings and small logs constructing the pen had been planted in the earth around this skeleton, somewhat in the form of a tepee		like a tepee		single individual	Very large log			Fowke and Moorehead 1894: 319-320
Seip Mound 1		1						10 ft west of primary mound	young adult, partially cremated			copper celts, copper breastplates, copper disks, flint-flake knives	Shetrone and Greenman 1931: 380-382

Seip Mound 1		2-7		logs, clay, gravel, fabric	chamber of logs, the chamber had been constructed of logs placed above one another and secured in place by large stones, small log placed between each burial	12 x 15 ft, no more than 2 ft high		base of the mound	inhumation, 4 adults, 2 infants, burial 3 was male, burial 4 female,	canopy of woven fabric and primary mound	clay and gravel platform ~3.5-4ft above the floor, lined with bark	shroud, skewers made of deer bone, ceremonial pipes of micaceous statite (2 are an effigy of a bird, others are effigies of animals), pearl beads, image of a swan cut from a tortoise shell, portions of tortoise shell engraved with the figure of a bird, coverings for stone buttons, boat-shaped objects of meteoric iron, cut jaws of a wolf, rods of copper, imitation copper nostrils, copper breastplate, bear caninesbutton -shaped object of clay and stone covered by copper foil, light-colored flint arrow-point, shell beads, copper button, small mica designs	Shetrone and Greenman 1931: 369-380
Seip Mound 1		9		logs, bark	smaller log molds				adult male cremation		bark layer covering the surface of a platform	copper breastplate, woven material	Shetrone and Greenman 1931: 460
Seip Mound 1		11		logs, stone slabs	stone slabs at each end of the platform				adult cremation		platform	copper breastplate, Fulgar shell container, combs made	Shetrone and Greenman 1931: 460

												from tortoise shell	
Seip Mound 1		12		logs, stones	log molds of unusual size, rows of stones placed along their outer margins	5ft 3in x ~2ft 7in			adult cremation		platform	copper celts, woven fabric	Shetrone and Greenman 1931: 460-462
Seip Mound 1		13		logs, clay				same clay floor as burial 14 and 15					Shetrone and Greenman 1931: 377-378
Seip Mound 1		14		logs, clay, grass, vegetable matter	log molds were 2 in height on all sides			same clay floor as burial 13 and 15	cremation		platform of charred grass, wood, and other vegetable matter	shell beads, copper plate	Shetrone and Greenman 1931: 377-378, 462
Seip Mound 1		15		logs, clay				same clay floor as burials 13 and 14					Shetrone and Greenman 1931: 377-378
Seip Mound 1		17		logs					cremation		medium-sized platform	flint blade	Shetrone and Greenman 1931: 462
Seip Mound 1		19		logs		of usual size		7 ft above the mound floor, outside of the primary mound	male, partially cremated		platform	copper breastplates, woven fabric, copper crescent	Shetrone and Greenman 1931: 383-385
Seip Mound 1		22		logs, bark					adolescent cremation	bark covering the body	platform	ceremonial copper celts, copper breastplates	Shetrone and Greenman 1931: 462
Seip Mound 1		23		logs					adult female cremation		small platform	flint-flake knives	Shetrone and Greenman 1931: 462-463
Seip Mound 1		26		logs, clay, stones	3 logs high, supported by stones and stakes	3 ft 3 in x 4ft 8in			multiple individuals cremated or fragmentary, one male partially cremated	a roof of seven split poles about four inches in diameter	clay platform	copper celt, sheet of mice, , chunk of galena (lead ore), pearl beads, barrel-shaped shell beads, copper earspools, imitation eagle claws made of bone, copper objects	Shetrone and Greenman 1931: 385-387

Seip Mound 1		27		logs					cremation		small platform	shell (Fulgar perversum) container	Shetrone and Greenman 1931: 463
Seip Mound 1		28		logs, clay, fabric	bordered by unusuaIIy large log-molds, eight smaIIer log-molds encircled the structure, apparently the remains of supports to the original log crib	5ft 5in x 5ft 7in			one adult cremation		clay platform covered by fabric	fabric, wooden disk, wooden tubular object, imitation alligator teeth of copper, imitation bear claws made of bone, copper breastplate, jaws of the wilidcat (carved in a geometric pattern	Shetrone and Greenman 1931: 387
Seip Mound 1		32		logs, bark, clay	clay platform surrounded by three-tiers of log molds, included postmolds in and around the NE corner	3 x 5 ft			male cremation	bark, running the length of the tomb	clay platform	bear canines, flaked knices, barrel-shaped shell beads, wooden objectscopper breastplates, woven fabric, copper earspools, arrowhead, large plain pottery vessel	Shetrone and Greenman 1931: 387-388
Seip Mound 1		36		logs, clay, charcoal, organic material		4ft x 2ft5in			adult cremation	small primary mound covering 36 and 39	platform of charcoal and organic material, fine clay spread on the floor	shale effigy of a human head, copper breastplates, copper earspools, copper covered stone buttons	Shetrone and Greenman 1931: 463-464
Seip Mound 1		37		logs					adult cremation and youth cremation		platform	copper breastplate, pearl beads, cloth, leather, copper celt	Shetrone and Greenman 1931: 464
Seip Mound 1		38		logs					adult cremation		platform	copper breastplate, woven fabric, bone needle	Shetrone and Greenman 1931: 464
Seip Mound 1		39		logs	log-molds three in height, large slabs of shale were set up around the	3.5 ft square		4.5 ft above the mound floor	adult cremation		platform	copper celt, copper earspools, copper breastplate	Shetrone and Greenman 1931: 464-465

					platform inside the log-molds								
Seip Mound 1		40		logs, charcoal		4.5 x 7ft			three individuals cremated		platform of charcoal and sand	copper celts, galena, stone earspool, pearl beads	Shetrone and Greenman 1931: 465-466
Seip Mound 1		41		logs					young adult cremation		platform	pendant made from the upper jaw of a beaver, large pearl bead, globular shell beads	Shetrone and Greenman 1931: 466
Seip Mound 1		42		logs		6 x 3ft		3ft above the mound floor, within the N edge of the primary mound	skeleton of a child		platform	black bear teeth set with pearls	Shetrone and Greenman 1931: 390
Seip Mound 1		43		logs	three tiers of log-molds, post-mold in the SW corner (d=11in)				adult cremation		platform	copper breastplate, woven fabric, leather, copper beads, effigy tooth of copper	Shetrone and Greenman 1931: 460-467
Seip Mound 1		45		logs, charcoal	log-molds three in height	3.5 x 4ft		below platform of burial 39	adult cremation		platform built up of charcoal on a foundation of heavy dark earth	ocean-shell container, copper breastplate, copper earspools, pearl beads, hollow copper hemispheres	Shetrone and Greenman 1931: 467
Seip Mound 1		46		logs		4ft 5in x 1ft 7in			adult cremation		platform	copper earspools, bone needles	Shetrone and Greenman 1931: 467
Seip Mound 1		48		logs		platform elevated 4ft			skeleton of a child, skull of an adult male on a pile of cremated bones		platform	copper celt, copper earspools, copper breastplate, spherical shell beads	Shetrone and Greenman 1931: 390-392

Seip Mound 1		49		logs, clay	square platform with logmolds three in height	4ft 5in all sides (square)			two cremations		square clay platform	flint-flake knives, copper earspools, copper breastplates, copper rod tapering to a point at one end in a handle of bone, leather and fabric, jaws of mountain lion stirpped with black and white pigment, copper celt	Shetrone and Greenman 1931: 392-393
Seip Mound 1		52		logs					adult female		platform	pearl beads, seed-pearl beads	Shetrone and Greenman 1931: 393-394
Seip Mound 1		53		logs	post-mold in the NE corner				adult cremation		platform	bone needles, mussel shell paint cup, mica links	Shetrone and Greenman 1931: 467
Seip Mound 1		58		logs, clay	logmolds three in height	3ft 4in x 2ft 1in			individual cremation		clay platform	obsidian ceremonial knives, chipped obsidian butterfly-shaped specimen, drill punch of meteorite iron, bear claws, flint-flaked knives, bone needles, pearl beads, button-shpaed object	Shetrone and Greenman 1931: 394
Seip Mound 1		59		logs					adult cremation		platform of medium size	copper breastplate, copper earspools, flaked knives, flint arrowhead	Shetrone and Greenman 1931: 469

Seip Mound 1		60		logs, charcoal		4x4ft			adult cremation		platform with layer of fine clean charcoal	bar-shaped gorget of chlorite, boat-shaped steatite ceremonial (fashioned in the image of a duck, copper crescent, copper earspools	Shetrone and Greenman 1931: 394-395
Seip Mound 1		61		logs					adult cremation		small platform	flint blanks of nodular flint	Shetrone and Greenman 1931: 469
Seip Mound 1		63		logs					adult cremation		small platform	copper earspools	Shetrone and Greenman 1931: 469
Seip Mound 1		64		logs		3.5 x 4ft 4in			adult and child piled at center		earthen platform	copper earspools	Shetrone and Greenman 1931: 469
Seip Mound 1		65		logs		4 x 2 ft			adult cremation		platform	fabric, carapace of a land turtle, head of the humerus of a deer	Shetrone and Greenman 1931: 469
Seip Mound 1		66		logs	log crib with unusually large log-molds, small stake holes at each corner	7ft x 2ft 10in			adult male	body covered in a shroud	earthen platform	four small bear canines, each set with a pearl, medium-sized copper breastplate with two large pearls, bone awls	Shetrone and Greenman 1931: 395
Seip Mound 1		67		logs	a dozen large angular blocks of granite stone surrounded the log-molds	3 x 3.5 ft			adult cremation		platform	copper earspools	Shetrone and Greenman 1931: 469-470
Seip Mound 1		68		logs, bark		3ft 4in square			no remains		platform, covered with a bed of bark	unworked mica	Shetrone and Greenman 1931: 470
Seip Mound 1		71		logs, clay, gravel	log-molds two in height				adult cremation and adolescent cremation		platform of clay and gravel	earspools, sea-shell containers	Shetrone and Greenman 1931: 470

Seip Mound 1		73		logs, clay, boulders	log-molds were three in height, originally supported by stakes on the west end				adult cremation		clay platform, several large granite boulders at each end	12 undrilled bear teeth, one cut mountain lion jaw, one circular and three rectangular shell gorgets, nine flaked knives of flint, one sea-shell container, one platform pipe ineffigy of a bird, 17 small bone awls, and about 200 pearl beads, seed pearls predominating	Shetrone and Greenman 1931: 395
Seip Mound 1		74		logs		3ft 10in x 2ft 3in			adult cremation		platform	cup of steatite	Shetrone and Greenman 1931: 470
Seip Mound 1		81		logs					cremation and full skeleton of an infant		platform	sea-shell container	Shetrone and Greenman 1931: 470
Seip Mound 1		85		logs				3 inches beneath the level of the mound floor	adult cremation		platform	perforated raccoon canines, flint flakes	Shetrone and Greenman 1931: 470-471
Seip Mound 1		86		logs	3 log-molds lying horizontally side by side on E, 2 on W side, north end 1 log-mold with 3 stakes, 2 at S end with 2 post-molds (d= 9in and 2in)	5 ft 10in x 2ft 10in			three adult cremations, one female, one male, one indeterminate		platform	copper celt, sea-shell container, copper ear-spool, pearl beads, copper breastplate, woven fabric, burnt cane, potsherds	Shetrone and Greenman 1931: 398-400
Seip Mound 1		88		logs		6ft 3in x 2ft 8in		on the grvel above the primary mound, 3ft above the floor of the mound	adult male cremation, other cremation and remains		platform	copper earspools, pearl beads, claw-shaped pendant of bone	Shetrone and Greenman 1931: 471
Seip Mound 1		89		logs		4ft 2in x 2ft 4in			2 adult cremations		platform	plain platform pipe, perforated bone awl	Shetrone and Greenman 1931: 471-472

Seip Mound 1		90		logs		6 x 3ft			2 adult cremations		platform	copper breastplate, pearl beads, rush mat, leather	Shetrone and Greenman 1931: 472
Seip Mound 1		91		logs	triangular platform	smallest in the mound			2 cremations		triangular platform		Shetrone and Greenman 1931: 485-486
Seip Mound 1		97		logs, stone slabs	platform surrounded by a number of vertically placed stone slabs at the inner edges of log-molds				2 adult cremations	indications of a roof of stone	platform	copper celt, pearl peads, flint-flaked knives, shark tooth	Shetrone and Greenman 1931: 472-473
Seip Mound 1		98		logs		2ft 2in x 1ft 3in			adult cremation		platform	pearl beads, copper earspool,half a cut of panther or mountain lion jaw	Shetrone and Greenman 1931: 473
Seip Mound 3		1		logs, sand, charcoal	outlined by usual log-molds			at base of mound	cremation		charcoal platform on light sand floor	copper bead	Shetrone and Greenman 1931:479
Hopewell Mound 23		2		logs, bark	surrounded by small timbers				adult		bed of bark	copper earspools, bone needle, rounded bone awl, flint-flake knives	Shetrone 1926: 54-55
Hopewell Mound 25		10		logs	composed of exceptionally large timbers (above d= 6in), three tiers high, stakes in the four corners and around the exterior for support	7.5 x 3.5 ft		in the interior mound	single individual			beads, bear canines, fragments of mica	Shetrone 1926: 67-68

Hopewell Mound 25		11		logs, stones, gravel	enclosed by a pretentious log structure, two logs deep, small posts in the corners and stakes and stones on the exterior for support	10 x 6 ft			one adult		earthen platform covered with gravel	ocean shell container, deer bone awls, copper ear ornaments, bear teeth perforated as beads, copper earspools, pearl beads, copper breastplates, large canines set with pearls, wooden headdress with copper wings and mica and woven fabric sewed with pearl beads, bear claws, bird feathers, and skull of a hawk	Shetrone 1926: 68-72
Hopewell Mound 25		12		logs	timber structure	7 x 4.5 ft			one adult			pearl beads, copper plates, copper tube enclosing reeds, copper curved head-plate	Shetrone 1926: 72
Hopewell Mound 25		15		logs	log enclosure				one adult		earthen platform	flint-flake knife	Shetrone 1926: 78
Hopewell Mound 25		17		logs	log enclosure				cremation			pearl beads, copper earspools	Shetrone 1926: 78
Hopewell Mound 25		21		logs	preparation was typical but the timbers of the log structure were unusually large				one adult			bear canines set with pearls, platform pipe of glossy greenish-black stealite	Shetrone 1926: 79

Hopewell Mound 25		22		logs, bark	log-molds enclosing it were much smaller than typical graves	same size as those constructe d for single individual			one adult female and one adult male	bark covering	earthen platform with bark layer	strip of mica, pearl and shell beads, grizzly canines set with pearls, split bear teeth, amber-colored chalcedony spear-point, rectngular copper plate, copper earspools, beaver incisors, cut jaws of wolf, curved copper head-plate, polished cannel-coal celt	Shetrone 1926: 79-81
Hopewell Mound 25		24		logs, bark	large postmold at NE corner and stakes around exterior of log-mold enclosure				adult male			copper plate with pearl beads, woven fabric garment, copper earspools, pearl beads, cut jaws of mountain lion, grizzly canines (one set with pearl), bone dowel pins, fulgar shell container	Shetrone 1926: 82-83
Hopewell Mound 25		34		logs	very large log structure				single individual with trophy skull of an adult		platform	jaw of wild-cat ornament, split bear canines, globular and barrel-shaped shell beads, pearl beads, copper plate, human upper jaw ornament, pearl-set bear canines, copper ear ornaments, mice spear-pointsm sheet	Shetrone 1926: 87-89

												of mice, female human figure cut from mica	
Hopewell Mound 25		35		logs	similar structure to 34			right beside 34 but on a separate platform	one adult and a trophy skull		platform	cut wild-cat jaw, shell beads, pearl beads, copper earspools, copper plates set with pearls, bear canines set with pearls, incised bear canines set into sockets of bone, copper ornament	Shetrone 1926: 89-90
Hopewell Mound 25		38		logs	small platform enclosed with logs	3 x 1ft 10in			cremation		platform		Shetrone 1926: 90
Hopewell Mound 25		39		logs	log enclosure, similar in its preparation to graves containing uncremated skeletons but has smaller dimensions	3ft 4in x 2ft 3in			cremation		platform	sheet of mica, copper breat-plate, drilled bear canines, flint flakes	Shetrone 1926: 90-92
Hopewell Mound 25		41		logs	earthen platform enclosed with heavy timbers	6.5 x 7.5 ft			adult male, adult female, indeterminate adult, and a trophy skull		earthen platform	copper plate, woven fabric, bone imitations of bear canine, perforated bear canines, bear canines set with pearls, barracuda jaw pendant, shell and pearl beads, bone needle, perforated racoon teeth, bear claws, flint-flake knives, bone awls, human jaw ornament, hollowed antler tine,	Shetrone 1926: 92-93

												black stealite ring	
Hopewell Mound 25		43		logs	log structure				cremated remains of an adult and child		earthen platform	ocean shell containers, copper breastplates, flint arrowpoint, tortoise-shell ornament	Shetrone 1926: 94
Hopewell Mound 26		1		logs	enclosed by a structure of small timbers				cremation			copper plate	Shetrone 1926: 103
Hopewell Mound 26		3		logs	enclosed by a structure of small timbers				cremation			copper earspools and shell beads	Shetrone 1926: 103
Hopewell Mound 26		6		logs	rectangular enclosure of logs				adult male			copper headdress, woven fabric, pearls, spherical shell beads, marginella shell beads, grizzly canines set with pearls, split bear canines, pearl beads, copper plate loin covering set with large pearls and fastened to a coarsely woven fabric, ocean shell container, gray pipestone platform pipe, circular shell disks	Shetrone 1926: 103-105
West			7	logs, blue clay, charcoal	small log walls on all sides	6ft 10in x 5ft 8 in, depth= 1ft 2in		on the center line	cremation	layer of blue clay	layer of charcoal		Porter and McBeth 1958: 30
West			8	logs, blue clay	walled up with small logs or poles (d=5 in) 21 inches above the bottom	10 ft x 6ft, depth=3.5 ft			dismembered skeleton	layer of blue clay	layer of blue clay		Porter and McBeth 1958: 30

West			9	logs, blue clay	small logs laid lengthwise	6ft x 3.5ft, depth= 35in		west of tomb 7	no remains		2 layers of blue clay		Porter and McBeth 1958: 30
West			10	logs, blue clay	a layer of charcoal which extended 2 to 3 ft around the tomb	7ft 9in x 3ft 4in, depth= 2ft 10in		on the center line	cremation	thin layer of blue clay, small mound, 12-15 inches high	blue clay	copper ear-spools	Porter and McBeth 1958: 30

Appendix D: Log Tomb Data