Health and Disease in Byzantine Greece: A Dental Analysis of the Temple of Ismenion Apollo, Thebes

by

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A thesis
presented to the University Of Waterloo
in fulfilment of the
thesis requirement for the degree of
Master of Arts
in
Public Issues Anthropology

Waterloo, Ontario, Canada, 2024

Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

ABSTRACT

Through a dental analysis, this study aimed to develop an understanding of the demography and health of the population at the archaeological site of Ismenion Hill, Thebes, Greece, dating to the early years of the Byzantine period (416-537 AD). Population demography was examined by determining the number of individuals present and their ages-at-death. It was suggested that 210 people were buried at Ismenion Hill and 60% of the population were non-adults. Further, diet was evaluated through the prevalence of dental calculus and caries, which suggested the population relied more heavily on plant food than meat, and that they possibly practiced a mix subsistence custom of both hunter-gatherer and agriculturalism. Overall health was explored through the presence of linear enamel hypoplasia, which indicated a possible stress period during weaning. Additionally, this study aimed to investigate any signs of leprosy on the dental remains, as previous assessments have indicated multiple individuals suffered from the disease (Liston 2017). It was proposed that four individuals had dental traits characteristic of leprosy. Ultimately, this research demonstrated the wealth of information generated from a dental analysis and deepened our understanding of the lifeways of the population at Ismenion Hill.

ACKNOWLEDGEMENTS

I would first like to thank the American School of Classical Studies at Athens, and the Wiener Laboratory for housing the skeletal collection of Ismenion Hill and providing a space to study the dental remains. I would also like to acknowledge the directors of the Ismenion Hill excavations and collections, Drs. Stephanie Larson and Kevin Daly at the University of Bucknell.

I want to extend my gratitude to Jeffery Coffin, BA, MA and Aparajita Bhattacharya, BA, for helping with the data collection in Greece. I also want to thank Dr. Maria Liston for inviting us to Athens to study the dental remains, and for taking such good care of us. As well, I want to thank Dr. Bonnie Glencross, at Wilfrid Laurier University, for being a wonderful member of my thesis committee.

Further, I want to thank my supervisor, Dr. Alexis Dolphin, for her help and guidance throughout the master's program. Her consistent encouragement and boundless wisdom shaped my academic growth and my interests as a researcher.

Finally, I want to thank my parents, Karen and Stephen, and my sister, Samantha, for their love and support throughout the year. And, of course, my dog, Oliver, for all the snuggles and cuddles.

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LIST OF ABBREVIATIONS

AD	Anno Domini
AMTL	Antemortem Tooth Loose
ASUDAS	Arizona State University Dental Anthropology System
CEJ	Cemento-enamel Junction
LATD	London Atlas of Tooth Development
LEH	Linear Enamel Hypoplasia
MLNI	Minimum Likely Number of Individuals
MNE	Minimum Number of Elements
MNI	Minimum Number of Individuals
N	Number
SRA	Short Root Anomaly
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

This research project was a dental analysis of human remains from the archaeological site of Ismenion Hill, Thebes, Greece, dating to the early years of the Byzantine period (416-537 AD) (Bolding 2017, in personal communication with Liston 2023). The goal was to develop an understanding of the demography, diet and health of this sample population. Demographic analysis included estimating the number of individuals present, and determining age-at-death using tooth development and dental wear. Further, the prevalence of dental calculus and caries were used to assess the dental health and diet of the sample. Population health was explored through the prevalence of linear enamel hypoplasia (LEH), a marker of childhood physiological stress. A secondary goal of this study was to explore the presence of leprosy at the site through dental evidence. Previous examinations of the bones indicated that 11.4% of the sample bore signs of the disease (Liston 2017). Interestingly, other illnesses including brucellosis, childhood leukaemia and metastatic cancer were found co-occurring with leprosy at Ismenion Hill. This evidence led Liston (2017) to suggest that the area was once the location of a hospital (Liston 2017). And so, this project aimed to investigate whether signs of leprosy were visible on the dental remains. This thesis outlines the relevance of this project to various publics, and its theoretical grounding. It also provides information on the context of Ismenion Hill. For a brief review of Greek scholarship in bioarchaeology, see Appendix A. Chapter 2 reviews the composition of the dental collection and the methods used within this analysis. The results are presented in Chapter 3, and placed within the wider social and cultural landscape to understand site demography, diet and health in Chapter 4. As well, Chapter 4 discusses potential dental evidence for leprosy within the population. Finally, Chapter 5 summarizes key findings and suggests future directions for the bioarchaeological study of Ismenion Hill.

1.1. Public Issues

Bioarchaeological research considers the public, defined as stakeholders, descendant communities, academic scholars and the general population, in many ways (Martin et al. 2013). Within recent years, the public has become increasingly concerned with the ethical practices of studying human remains (e.g. DeWitte 2015; Gnecco 2019; Guttman-Bond 2019). The integration of modern technological advancements into the field of bioarchaeology has allowed for research in microscopic, stable isotope, trace element and aDNA analyses. However, these analyses require the destruction of a piece of the human skeleton (Dolphin et al. 2016; Pálsdóttir et al. 2019). This raises ethical concerns for the treatment of deceased humans. Many cultures believe that tampering with ancestral remains and destruction of the human body will disturb the soul in the afterlife, causing a restless spirit and the traumatization of the living community (Bardill et al. 2018; Pfeiffer et al. 2014). As well, the bioarchaeological record is limited in that it is not possible to create exact replicas of samples from the past. Thus, the destruction of teeth eliminates a piece of history that cannot be replaced. Many members of academia and the general public have issues with the loss of a part of this finite resource (DeWitte 2015; Hutchings & La Salle 2019; Walker 2000). Therefore, non-destructive dental analysis, like that conducted in this study, is an ideal alternative to destructive methods, as observational features of teeth can provide valuable information without damaging the collection (Armelagos & Cohen 1984; Hillson 1996). Consequently, an observational analysis of dentition can satiate the public's desire for the preservation and care of human remains while benefiting the scientific community.

1.2. Theoretical Grounding

At its foundation, this study is rooted in a biocultural paradigm, defined as "the intertwined biological and cultural aspects of any given human phenomena […] explicitly emphasizing the dynamic, dialectical interactions between humans and their larger physical, social, and cultural environments" (Zuckerman & Martin 2016: 7). Bioculture examines the interplay of evolutionarily derived human biology and constructed environments, and the ramifications these interactions have on health (Zuckerman & Martin 2016). It considers the ways in which humans and their environments, including social and physical landscapes, are co-constructed. Biocultural theory integrates theory and methodology from all fields within anthropology while embracing human complexity and avoiding simplistic, deterministic explanations (Hoke & Schell 2020). Within a biocultural approach, human variation is considered a function of phenotypic plasticity and responsiveness to elements within the greater environments that construct and moderate one another (Zuckerman & Martin 2016). Biocultural methodology amalgamates multiple variables, processes and mechanisms of dealing with the intersection of biological and cultural factors. Ultimately, the human experience cannot be interpreted without consideration of the diverse landscapes that modify, influence and shape the human phenomena. Therefore, this study employed a biocultural theory for the analysis of the dental remains at Ismenion Hill by acknowledging and examining the dentition against the backdrop of the social settings and considering the ways in which cultural practices and human biology mutually influence each other.

Furthermore, this study explores human health at the population and individual level. According to the World Health Organization (WHO), health is "a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity" (Callahan

1973: 77; WHO 2023). While this definition has been used in anthropological and archaeological studies, the nature of bioarchaeology limits the ability to fully assess mental and social well-being as the bioarchaeological record only holds partial evidence of past lives. Interestingly, the Osteological Paradox, developed by Wood et al. (1992) discusses this shortcoming and bioarchaeology's failure to account for the heterogeneity of human frailty. Bioarchaeological studies can easily assign a blanket assessment of health across a population, without considering individual reactions to illness, susceptibility to diseases, and responses to stressors (DeWitte & Stojanowski 2015; Wood et al. 1992). Moreover, scholars often consider stress markers as evidence of poor health, when they actually indicate the opposite. Stress markers usually take years to develop, and therefore, demonstrate the ability of an individual to survive stress events, suggesting good health. And so, the high prevalence of stress markers can be an indication of individual and population hardiness and survivorship (Ortner 1991; Wood et al. 1992). Consequently, interpretations of health among ancient populations must be carried out with caution, and must acknowledge the diversity of human frailty. As well, scholars should be wary to not make grand assumptions of health and mortality based on stress markers. Collectively, this study takes into consideration the above cautions in its assessment of dental health. The specific definition of health for this research is the absence, or low prevalence, of disease or features that negatively impact the functionality of the teeth.

1.3. Context of Ismenion Hill

Ismenion Hill is a small, elevated area tucked into the southeastern corner of Thebes, adjacent to the Electra Gates, with the River Ismenios flowing at its base (Figure 1) (Daly & Larson 2017). The site was first used during the Mycenean Bronze Age, when chamber tombs were built on the site. Later in the Geometric Period (900-700 BC) it was used as the location of the construction of the Temple of Apollo Ismenios (Warwick 2017). In Greek mythology, this was the site were Caanthus, the son of Oceanus and brother of the nymph Melia, shot and killed the god Apollo (Daly & Rengel 2009). Prominent features of the temple included a Cedar wood statue and the statues of Athena and Hermes Pronaoi (Carucci 2010). The site remained a place of cultic and religious practice until Christianity began to spread through Greece in the early and middle years of the Byzantine period (Bruce 2004; Makrides 2009; Warwick 2017). In the 5th century AD, when Christianity reached its peak, Ismenion Hill was turned into a cemetery and refuse area to discredit previous polytheistic beliefs and promote the new Christian customs (Aravantinos 2017).

Figure 1. Outline of Ismenion Hill (yellow outline), Thebes, Greece (Google Earth 2023).

Excavations of Ismenion Hill began in the early 20th century, led by Greek archaeologist Antonios Keramopoullos. Twenty-eight burials were excavated by Keramopoullos, all of which contained human remains. Unfortunately, work at Ismenion Hill ceased in 1917 with the expansion of World War I (Symeonoglou 2014; Warwick 2017). The site remained untouched until Stephanie Larson and Kevin Daly at Bucknell University recommenced excavations in

2011 and finished in 2015. This first field season focused on clearing the dishevelment left behind from past excavations and establishing a digital grid system using non-invasive methods. In the 2012 excavation, the Parking Lot Grave (PLG) was cleared, identifying eight previously disturbed graves. The 2013 field season successfully determined the boundaries of the archaeological site and exhumed multiple burials and rock cuttings. In 2014, excavations extended into the temple area and the eastern hillside, unearthing multiple burials and bothroi (refuse pits). The last field season in 2015 cleared the hill in a series of 5x5m and 10x10m areas, and excavated the remaining bothroi, as well as a rectangular water feature (RWF) believed to be part of the original temple system. Collectively, the excavations led by Larson and Daly uncovered 20 new graves (Daly & Larson 2017). While the excavations were completed in 2015, publications on the site have been limited. The few articles on Ismenion Hill focus on pottery and architecture with brief reviews of the graves (Daly & Larson 2017). However, at the 2017 annual conference hosted by the American School of Classical Studies at Athens (ASCSA), Dr. Maria Liston, of the University of Waterloo, presented a preliminary assessment of the skeletal remains. The bone assessment indicated an age-at-death distribution atypical of a Byzantine cemetery with more adults (68.5%) than non-adults (31.5%) (Table 1). As well, there was a high prevalence of leprosy (11.4%) with at least 21 individuals exhibiting skeletal symptoms of the disease. Other diseases, including brucellosis, metastatic cancer and childhood leukemia were found to co-occur with leprosy at Ismenion Hill. It is suggested that the high prevalence of disease and illness found at the site indicates that it was used as a hospital for the gathering of sick people (Liston 2017). Supporting this is the construction of the Church of St. Luke adjacent to Ismenion Hill. In biblical writings, St. Luke was a physician and was seen aiding the sick

(Marx 1980; Raynor 2015). As well, the River Ismenios was believed to have natural healing properties (Symeonoglou 1985).

Age-at-death (years)	Number of Individuals	Percentage (%)
Fetus/Infant	26	14.1
Child	32	17.4
Adult	126	68.5
TOTAL	**184**	100

Table 1. Preliminary estimations of age-at-death distribution based on the bone analysis (Liston 2017; Liston 2023 personal communication).

Moreover, many of the exhumed skeletons at Ismenion Hill have had the upper portion of their body removed shortly after burial, leaving behind the lower body to be excavated many centuries later. Exhumation of this style became a common practice in Christian Greece, although its origin in uncertain (Liston 2017). Preliminary radiocarbon dating of the Byzantine section of the cemetery gave a time range of cal. 416-537 AD (Bolding 2021, in personal communication with Liston 2023). As well, initial DNA pathogen testing noted the presence of *Salmonella typhi,* the bacterium which causes Typhoid fever (Neumann 2021, in personal communication with Liston 2023). Prior to this research project, no analysis was completed on the dental remains in the collection. Therefore, this study aimed to fill this gap in knowledge by conducting a dental analysis of the surviving dentition from Ismenion Hill. The information generated by this research adds to the understanding of the nature of the site and the lifeways of the population.

CHAPTER 2: MATERIALS AND METHODS

2.1. Materials

This study analyzed human dental remains from 28 burials uncovered by Keramopoullos in the early 1900s (Voutsaki 2003), and 20 burials excavated by Larson and Daly during their 2011-2015 field seasons. The sample was comprised of both loose teeth and *in situ* teeth in mandibles and maxillae. It should be noted that Grave X from the Larson and Daly excavations of 2011-2015 was initially labelled as “Near Grave 19/10” but was given its own Grave designation in this project as the originating grave could not be conclusively determined. As well, there was one grave from the Larson and Daly field seasons that was not given a title, so for clarity it was labelled in this study as Grave Y.

2.2. Methods

Within this study, non-adults were defined as individuals whose dentition is not fully developed as they possess teeth that are not completely formed. Following the London Atlas of Tooth Development (AlQahtani et al. 2009), the final teeth to develop are the third maxillary and mandibular molars, which are fully complete at 20.5 years. Therefore, non-adults are considered individuals under the age of 20.5 years of age. Adults are individuals with fully developed teeth and are, thus, older than 20.5 years. This coincides with historical and literary evidence that recognizes non-adults as those aged from birth to approximately 20 years. Byzantine society divided childhood into three stages. *Infantia* (infancy) was assigned to children younger than seven years of age (Nathan 2020; Vuolanto 2020). *Pueitia* (juvenile) occurred until the children reached puberty around the age of 12 or 14 years, for girls and boys, respectively (Nathan 2020; Tritsaroli & Valentin 2008). Following this, *adulescentes* (adolescence) was the time when individuals were considered old enough to marry, have children, or work professionally, however they were not socially considered adults until 18 years of age, and legally attributed adult status at 25 years (Nathan 2020; Tritsaroli & Valentin 2008). Therefore, the biological markers of adulthood indicated by complete tooth formation at the age of 20.5 years, roughly aligns with the cultural and social classifications and was, thus, appropriate to use within this project.

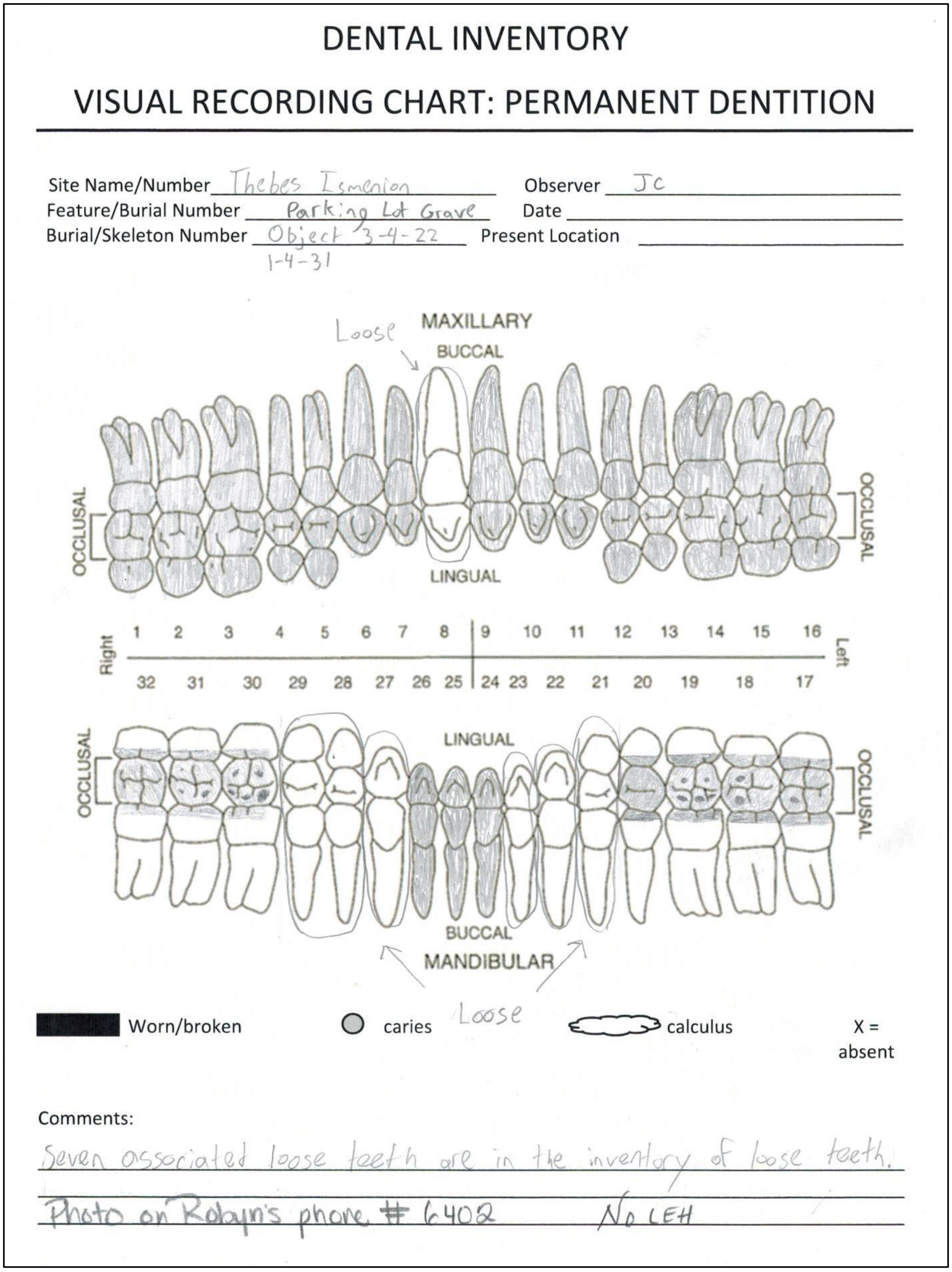
2.2.1. Inventory and Identification

Teeth from Ismenion Hill appeared in three forms: 1) individual loose teeth that were associated with a grave but not a specific mandible, maxilla or person (Figure 2); 2) small groups of teeth that remained intact in pieces of bone associated with a grave but not a specific individual (Figure 3); and 3) *in situ* teeth in mandibles or maxillae, or loose teeth that fit into a mandible or maxilla, that were associated with one specific individual, as was determined during excavations (Figure 4). Loose teeth and small groups of intact teeth that did not belong to a known individual were identified by Dr. Alexis Dolphin (University of Waterloo) in accordance with Hillson (1996) standards. Four characteristics of each tooth were documented: 1) permanent or deciduous; 2) tooth type (incisor one or two, canine, premolar one or two, molar one, two or three); 3) mandibular or maxillary, and 4) left or right sided. Identified teeth were recorded by grave in a Microsoft Excel spreadsheet by Aparajita Bhattacharya, BA (University of Waterloo). Intact teeth and loose teeth associated with specific individuals were identified by Jeffery Coffin, BA, MA (University of Waterloo) and myself following Hillson (1996) and were recorded in a ‘Dental Inventory Sheet’ (Figure 5) following Buikstra and Ubelaker (1994). These were later transferred into the Excel spreadsheet and organized by grave.

Figure 2. Example of a loose tooth, associated with a grave but not an individual.

Figure 3. Example of a group of teeth, associated with a grave but not an individual.

Figure 4. Example of *in situ* teeth and a loose tooth that was associated with a specific individual from Grave 4 as originally noted during excavations.



DENTAL INVENTORY

VISUAL RECORDING CHART: PERMANENT DENTITION

Site Name/Number Thebes Ismenion Observer JC

Feature/Burial Number Parking Lot Grave Date

Burial/Skeleton Number Object 3-4-22 1-4-31 Present Location

Worn/broken caries calculus X = absent

Comments:

Seven associated loose teeth are in the inventory of loose teeth.

Photo on Robyn's phone # 6402 No LEH

Figure 5. Example of a completed Dental Inventory Sheet used to record intact dentition.

2.2.2. Number of Individuals

Determining the minimum number of individuals (MNI) present at Ismenion Hill was an important step in understanding the demography of the population at this site. Originally established by Chase and Hagaman (1987), MNI was grounded in probability theory for an estimation of abundance for archaeological collections (Marshall & Pilgram 1993; Plug & Plug 1990). MNI is based on the most repeated tooth present, however, it often greatly under-represents the actual number of individuals in a collection (Adams & Konigsberg 2004). An alternative to MNI that provides a better representation of the number of individuals present, is the Minimum Number of Elements (MNE) (Robb 2016). MNE counts repeated specific regions of an element. However, this method is rarely used on dental collections as not all elements of teeth are unique enough to be distinguishable by type. As well, the small size of teeth makes this method difficult to use as does uneven wear patterns. Thus, for the dental collection from Ismenion Hill, employing MNE would be inappropriate and yield inaccurate results.

A better means of determining the number of people present at Ismenion Hill is the Most Likely Number of Individuals (MLNI). MLNI, outlined by Adams and Konigsberg (2004), is based on pair matching where two or more elements belong to the same individual. To determine the MLNI for the Ismenion Hill collection, the recorded teeth were first divided into their respective graves, as it was assumed that an individual's remains were not spread between multiple burials. To establish matches, undeveloped teeth were assessed for age (AlQahtani et al. 2010), while complete teeth were evaluated for wear (Scott 1979; Smith 1984). Teeth from the same grave, with identical ages or wear stages were analyzed for possible matches. Matches were based on similar physical appearances, including size and shape, taphonomic effects (e.g. tooth colour, degree of preservation), dental calculus and pathologies, including linear enamel hypoplasia (LEH). Once all possible matches were identified, the pairs were examined alongside each other to determine if they were from the same individual based on calculus, pathologies and appearance. After all potential pairings were distinguished, the remainder of the teeth were assessed for the most repeated tooth type. For each grave, the matches and counts of the repeated tooth type were added to the number of people with *in situ* dentition, to collectively total and determine the MLNI, providing a more accurate representation of the number of individuals present. However, this method does have its limitations. Primarily, wear scores are not always identical across the mouth, and so, only comparing teeth based on matching wear scores will potentially, yet unintentionally, miss possible matches. Another limitation of this method, is that it does not account for individuals that have both permanent and deciduous dentition as seen between the ages 4.5 and 12.5 years old.

Grave 38 can be used as an example of how MLNI was calculated for Ismenion Hill (Appendix B, Table 1). This grave had 90 loose teeth and two teeth that were intact in a small piece of maxilla, that were not associated with any specific individuals (Figure 6). These teeth were identified and inventoried in the Excel sheet. Teeth were then assessed for age-at-death and wear where possible, and evaluated for pairs based on matching ages or scores. For instance, an RI^1 and LI^1 both had a wear score of four, and when compared, had the same colour, degree of preservation, and LEH bands at relatively the same measurements (3.29mm and 5.14mm, and 3.35mm and 5.56mm, for RI^1 and LI^1, respectively) (Figure 7). Therefore, these two teeth were identified as a pair, and thus from one individual. This was repeated for three other pairs. The four sets of pairs within Grave 38 were too dissimilar to indicate any came from the same individual. Thus, four individuals were present based on pair matching, plus another person represented from the two unassociated teeth in the small maxilla piece. The remainder of the loose teeth were assessed for the most repeated tooth type. This was RI^2, which was seen four times, thus the number of individuals among the remaining loose teeth was four. Therefore, the loose, unassociated teeth indicate eight individuals present. Additionally, there were nine discrete individuals that were identified during the excavations of Grave 38 (Figure 8). These were identified and inventoried on the Dental Inventory Sheets and later added to the Excel document. Collectively, the eight individuals determined from the loose, unassociated teeth, plus the nine individuals with intact dentition, indicate an MLNI of 17 people for Grave 38.

Figure 6. Small maxilla fragment from Grave 38, indicated one individual.

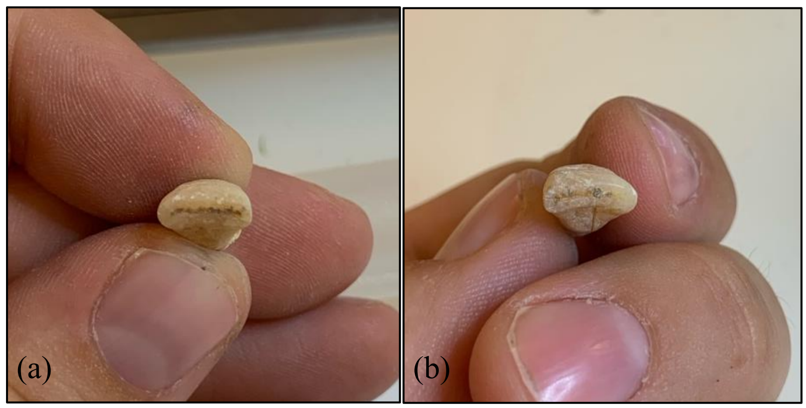


Figure 7. (a) RI^1 and (b) LI^1 from Grave 38, identified as a matching pair.

Figure 8. Example of *in situ* dentition associated with a specific individual (Skeleton F) from Grave 38.

2.2.3. Age-at-Death

2.2.3.i. Undeveloped Teeth

Teeth are ideal for determining age-at-death as their development and eruption occurs at close-to-universal and known rates (Demirjian 1986; Garn et al. 1960; Smith 1991). Many scholars have developed different methods for age assessments. Moorrees et al. (1963) developed an ageing system based on dividing the tooth into fractions and assigning each fraction an age range. However, this method lumps all single-rooted teeth, and all double-rooted teeth together, ignoring individual tooth growth times. As well, this method requires the biological sex of the individual to be known, thus ruling out its use for this study. Ubelaker (1989) established a method of assessing age by comparing individual teeth to the development stages of the other teeth in the mouth, while Schour and Massler's (1941) developed a method using the calcification patterns of teeth to determine age. These methods, however, are not highly accurate when applied to populations outside of archaic North American as they were built solely with Native American samples (AlQahtani et al. 2014). Other methods of ageing dentition use dental measurements. For example, the method established by Lamendin et al. (1992) relies on the diameter of the root apex, while Bang and Ramm (1970) employ a series of regression equations using crown height and width measurements. The circumstances of this project's data collection period did not allow for the recording of dental measurements due to time limitations. Further, these techniques, and those similar to it, are dependent on equations that are different for each method, and are thus difficult to replicate. As well, aging methods have been developed based on destructive analysis. An example of this is the measurement of the layers of cementum depositions from tooth thin sections, as established by Gustafson (1950), and Zander and

Hurzeler (1958). However, the parameters of this study did not allow for destructive methods to be conducted.

The most ideal method of ageing developing teeth for Ismenion Hill was the London Atlas of Tooth Development (LATD), created by AlQahtani et al. (2009) (Figure 9). AlQahtani et al. modified and updated the dental stages established by Moorrees et al. (1963) by differentiating the development of the dentine edges of tooth roots through the apex width and the size of the periodontal ligament space among the later age stages. AlQahtani et al. also modified Bengston's (1935) development stages to define tooth eruption times more clearly in relation to the bone level. This method, originally developed using Medieval English samples, has been tested on a wide range of biogeographical regions including Saudi Arabia, Spain, Italy (AlQahtani et al. 2017), South Africa (Esan & Schepartz 2018), Portugal (Palović et al. 2017) and China (Zhou et al. 2023), making the LATD one of the most universal ageing methods for dentition. The LATD has also be tested against other ageing methods, including those developed by Ubelaker (1989), and Schour and Massler (1941), and has remained the most accurate and replicable (AlQahtani et al. 2014). Further, the user-friendly interface allows for quick yet precise evaluations for individual teeth and groups of teeth. Therefore, the LATD method was the best choice for age assessment at Ismenion Hill.

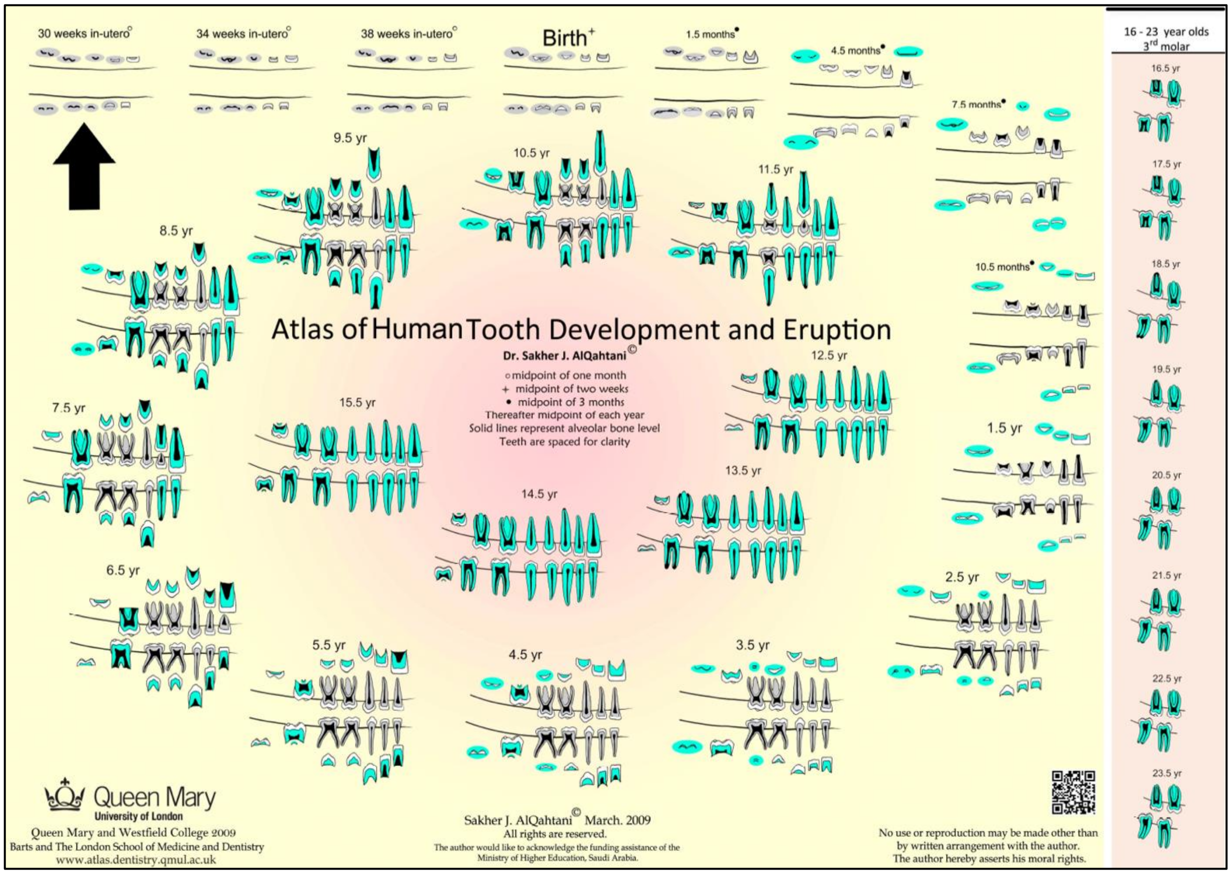


Figure 9. The London Atlas of Tooth Development by AlQahtani et al. (2009), used to determine age-at-death of developing teeth.

2.2.3.ii. Developed Teeth

Completely developed teeth were assessed for age-at-death based on wear scores. The understanding is that over time, wear will increase and can be associated with specific ages. However, any method that is based on wear patterns to determine age is highly population-specific. For example, Helm and Prydsø (1979) used wear for age estimations based on mandibular molar seriation of Medieval Danes; Prince et al. (2008) employ Bayesian analysis for dental wear aging in modern Balkan populations; Dreier (1994) used regression equations for assessing age of protohistoric Arikara of the North American Plains. Wear rates are greatly dependent on environmental and cultural factors which is distinct for each population. Therefore, these methods can only be applied to populations that are very similar to the ones they were developed from. Furthermore, these systems of determining age from dental wear use different methods of analyses (molar seriation, Bayesian statistics, regression equations) which are rarely transferable or comparable between populations. As it stands, there are only a few studies of ancient Thebes that give a brief nod to dental wear (e.g. Nerlick & Zink 2003; Wade et al. 2012), but none that provide an in-depth analysis of wear for the use of age estimation. Therefore, wear of the dentition of Ismenion Hill can only be used to comment on general age (young, middle, older adult) (Figure 10).

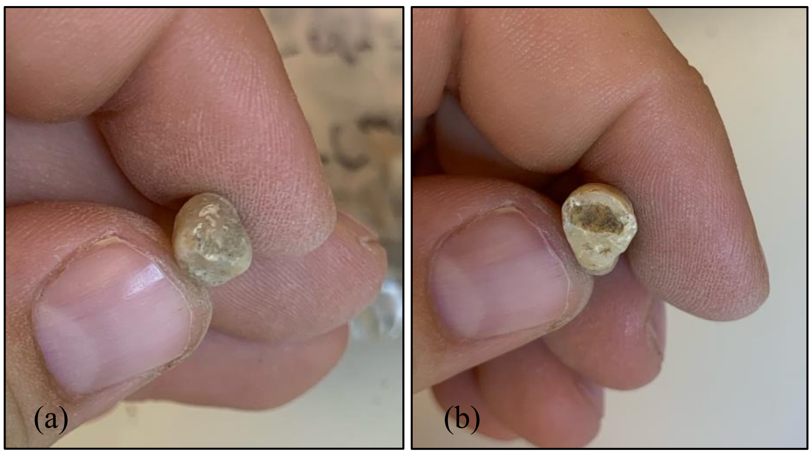


Figure 10. Example of (a) lower wear score of 1 indicating a younger adult, and (b) higher wear score of 6 indicating an older adult, both from the Parking Lot Grave.

2.2.4. Dental Wear

Dental wear was recorded for complete permanent teeth to help establish the MLNI and a general overview of adult ages. Dental wear of the incisors, canines, and premolars were assessed and recorded in accordance with Smith (1984), while molar scores followed Scott (1979). Smith's method was ideal to use as it has been tested against multiple populations from different geographical and temporal periods with high accuracy. As well, the method is user-friendly as it provides written and illustrated descriptions. Thus, incisors, canines and premolars were scored and recorded following Smith (1979) along the eight-point scale based on the amount of dentine exposed and enamel worn (Figure 11). Molars, however, were assessed using Scott's (1979) method as Smith's system poorly discriminates the lower wear stages of molars. Unlike Smith, Scott takes into consideration the large, variable surface area of molars. Thus, following Scott, the occlusal surfaces of molars were scored by four quadrants on a scale of one to ten (Figure 12). The quadrants were then added to give a sum score of the tooth ranging from 0 to 40.

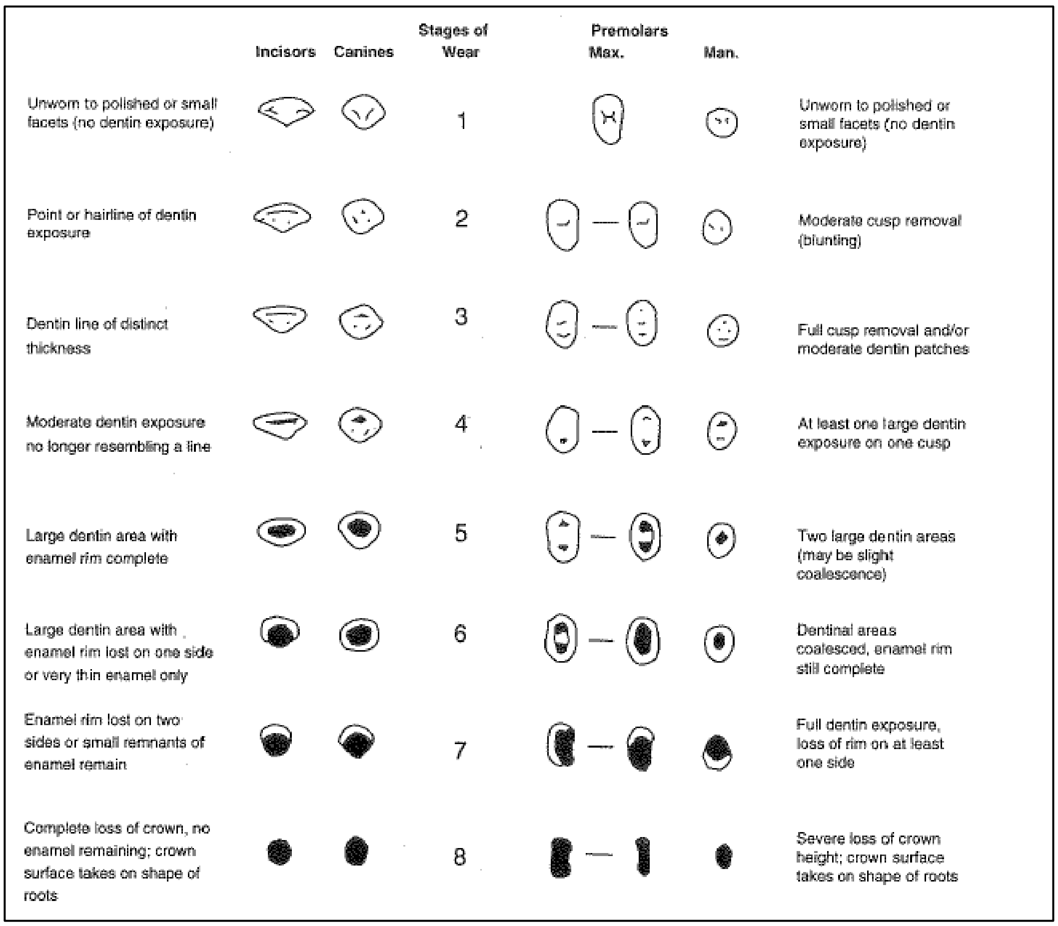


Figure 11. Dental wear stages for incisors, canines and premolars following Smith (1984, reprinted in Buikstra and Ubelaker 1994: 52)

Attrition scoring technique

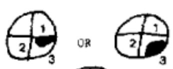
	Score	Description
	0	No information available (tooth not occluding, unerupted, antemortem or postmortem loss, etc.)
	1	Wear facets invisible or very small
	2	Wear facets large, but large cusps still present and surface features (crenulations, noncarious pits) very evident. It is possible to have pinprick size dentine exposures or "dots" which should be ignored. This is a quadrant with *much* enamel.
	3	Any cusp in the quadrant area is rounded rather than being clearly defined as in 2. The cusp is becoming obliterated but is not yet worn flat.
	4	Quadrant area is worn flat (horizontal) but there is no dentine exposure other than a possible pinprick sized "dot."
	5	Quadrant is flat, with dentine exposure one-fourth of quadrant or less. (Be careful not to confuse noncarious pits with dentine exposure.)
	6	Dentine exposure greater: more than one-fourth of quadrant area is involved, but there is still much enamel present. If the quadrant is visualized as having three "sides" (as in the diagram) the dentine patch is still surrounded on all three "sides" by a ring of enamel.
	7	Enamel is found on only two "sides" of the quadrant.
	8	Enamel on only one "side" (usually outer rim) but the enamel is thick to medium on this edge.
	9	Enamel on only one "side" as in 8, but the enamel is very thin—just a strip. Part of the "edge" may be worn through at one or more places.
	10	No enamel on any part of quadrant—dentine exposure complete. Wear is extended below the cervicoenamel junction into the root.

Figure 12. Dental wear stages for molars established by Scott (1979, reprinted in Buikstra and Ubelaker 1994: 53).

2.2.5. Dental Metrics and Non-Metrics

Dental metrics and non-metrics can provide insight into group genetics (Lukacs & Pal 2013; Prowse & Lovell 1995) and population differences (Molto 1985; Parras 2004; Scott & Turner 1988). Mayhall (1992), Moorrees (1957), Rogers (1984), and Buikstra and Ubelaker (1994) suggest tooth measurements be taken mesiodistally, buccolingually and labiolingually for crown width, and from the occlusal surface to the cemento-enamel-junction (CEJ) for crown height. However, these measurements were not recorded during the dental collection period of this study due to time limitations. Nevertheless, dental non-metric traits, a series of qualitative features often associated with specific geographical populations, were recorded as present or absent based on the Arizona State University Dental Anthropology System (ASUDAS), developed by Turner et al. (1991).

2.2.6. Dental Calculus

Dental calculus is a hard deposit of calcified plaque mainly made of calcium phosphate mineral salts. Calculus is highly useful for diet reconstructions as it traps plant phytoliths and food remains (Buikstra & Ubelaker 1994; Power et al. 2018; Radini et al. 2017). The deposition and distribution of calculus is highly variable and individually dependent (Aghanashini et al. 2016; Lieverse 1999; MacKenzie et al. 2023). There are multiple methods of recording calculus based on the amount and location of the plaque on the tooth. Dobney and Brothwell (1987) developed a method that scores calculus on a five-grade system using radiographs. Brothwell (1981) recorded calculus macroscopically on a three-point scale of small, moderate and large amounts of calculus, to which Buikstra and Ubelaker (1994) modified, extending the grading system to include absent and unobservable. Unfortunately, both methods are time-consuming and the tight constraints on the data collection period of the project did not allow for dental calculus to be recorded in-depth. Therefore, calculus was simply recorded as present or absent for loose and *in situ* teeth.

2.2.7. Dental Pathologies

2.2.7.i. Dental Caries

Dental caries are openings or holes in teeth that developed from bacterial infection and tooth decay. They are the most common dental pathology and can be informative of diet as there is a high correlation between increased caries frequency and the intake of food rich in sugar and carbohydrates (Powell 1985; Turner 1979). Particularly, the prevalence of dental caries can be used to determine subsistence practices as the rate of caries increases with a heavier reliance on agricultural food sources over hunted/gathered resources, as most harvested crops contain high levels of sugar (Armelagos & Cohen 1984; Moorrees 1957; Rose et al. 1991). For this study, caries were recorded as present or absent for loose and *in situ* teeth.

2.2.7.ii. Linear Enamel Hypoplasia

Linear enamel hypoplasia (LEH) is a deficiency in tooth enamel thickness caused by systemic metabolic stress, localized trauma or hereditary anomalies (Ogden 2007). These appear on teeth as linear indents on the enamel that can be recorded and measured. LEH can be analyzed microscopically, as established by Hassett (2011), however, this method is time-consuming and thus it did not fit with the parameters of the project. Therefore, LEH lines were measured macroscopically in accordance with Buikstra and Ubelaker (1994). Hypoplasia lines were measured from the midpoint of the labial/buccal cemento-enamel junction (CEJ) to the midpoint of the LEH band. This measurement method was employed because root length is highly variable and can be affected by multiple factors including nutrition, trauma and stress (Ogden 2007). As well, the occlusal surface of a tooth is often uneven, fractured or broken making it difficult to find a universal point to measure from. And so, the CEJ is the ideal point of measurement. Using digital calipers to ensure highest accuracy, measurements were taken (in millimeters) for each LEH band on a single tooth and recorded in the Excel sheet. The LEH measurements were then converted to age-at-deposition estimations using equations established by Goodman and Rose (1990) (Figure 13). An individual, from Grave 38, can be used as an example of how Goodman and Rose's calculations were conducted. This individual had two teeth with two LEH lines

(RI^1, LI^1). The height of one LEH band for the RI^1 was measured at 3.29mm. The equation for a maxillary incisor was: -(.454 x Ht) + 4.5. Therefore, the equation for the age of the deposition of this LEH was -(.454 x 3.29) + 4.5 = 3.0, indicating this individual was three years of age when the line developed. The other line on the RI^1 was 5.14mm; the equation was -(.454 x 5.14) + 4.5 = 2.2, indicating an age of 2.2 years at LEH deposition. The LI^1 LEH measurements were very similar to the RI^1 with 3.35mm and 5.56mm. The equations for this tooth were -(.454 x 3.35) + 4.5 = 2.9 and -(.454 x 5.56) + 4.5 = 2.0, indicating the LEH bands were developed at 2.9 and 2.0 years of age. Therefore, it is suggested that this individual underwent a period of stress at the ages around two and three years. This process was repeated for each tooth with observable LEH.

Tooth	Formulae[2]
Maxillary Teeth	
I1	Age = −(.454 × Ht) + 4.5
I2	Age = −(.402 × Ht) + 4.5
C	Age = −(.625 × Ht) + 6.0
Pm1	Age = −(.494 × Ht) + 6.0
Pm2	Age = −(.467 × Ht) + 6.0
M1	Age = −(.448 × Ht) + 3.5
M2	Age = −(.625 × Ht) + 7.5
Mandibular Teeth	
I1	Age = −(.460 × Ht) + 4.0
I2	Age = −(.417 × Ht) + 4.0
C	Age = −(.588 × Ht) + 6.5
Pm1	Age = −(.641 × Ht) + 6.0
Pm2	Age = −(.641 × Ht) + 7.0
M1	Age = −(.449 × Ht) + 3.5
M2	Age = −(.580 × Ht) + 7.0

[1]Age = age in years; Ht = distance of the LEH in mm from CEJ.

Figure 13. Equations for estimation of age from LEH measurements established by Goodman and Rose (1990: 98).

CHAPTER 3: RESULTS

3.1. Inventory and Identification

From the Ismenion Hill collection, 1,871 teeth were identified; 1160 (62.0%) were unassociated loose teeth, and 711 (38.0%) were *in situ* teeth from specific individuals (Table 2). See Appendix C, Table 1 and 2 for a complete inventory. The total number of permanent teeth (N=1,718; 91.8%%) included 394 (22.9%) incisors, 241 (14.0%) canines, 439 (25.6%) premolars, 644 (37.5%) molars. The total number of deciduous teeth (N=153; 8.2%) included 31 (20.3%) incisors, 21 (13.7%) canines and 101 (66.0%) molars (Table 3).

Grave	Loose Teeth	*In situ* Teeth	TOTAL	Percent of Total (%)
4	51	37	**88**	4.7
5	134	0	**134**	7.2
9	163	0	**163**	8.7
10	1	0	**1**	0.1
12	52	49	**101**	5.4
18	1	0	**1**	0.1
19	2	163	**165**	8.8
20	24	153	**177**	9.5
25	43	28	**71**	3.8
26	9	67	**78**	4.2
27	109	26	**135**	7.2
34	0	2	**2**	0.1
38	91	60	**151**	8.1
40	16	20	**36**	1.9
41	35	8	**43**	2.3
42	0	4	**4**	0.2
43	0	16	**16**	0.9
45	102	0	**102**	5.5
46	1	16	**17**	0.9
X	1	0	**1**	0.1
Y	55	0	**55**	2.9
PLG	268	38	**306**	16.4
RWF	0	24	**24**	1.3
TOTAL	**1160**	**711**	**1871**	100

Table 2. Division of unassociated loose teeth and associated *in-situ* teeth.

Grave	Tooth Type							TOTAL
	I	C	PM	M	i	c	m	
4	13	14	27	32	0	0	2	**88**
5	30	10	30	44	0	4	16	**134**
9	27	26	32	63	0	1	14	**163**
10	0	0	1	0	0	0	0	**1**
12	23	13	27	32	2	2	2	**101**
18	0	0	0	1	0	0	0	**1**
19	37	21	37	60	3	2	5	**165**
20	38	18	37	55	10	6	13	**177**
25	13	6	16	21	4	1	10	**71**
26	17	10	18	31	0	0	2	**78**
27	23	17	23	59	2	2	9	**135**
34	0	0	2	0	0	0	0	**2**
38	35	18	41	55	1	0	1	**151**
40	6	6	12	12	0	0	0	**36**
41	13	7	10	11	0	1	1	**43**
42	0	0	2	2	0	0	0	**4**
43	4	2	4	6	0	0	0	**16**
45	13	12	21	41	4	0	11	**102**
46	4	2	4	7	0	0	0	**17**
X	0	0	0	1	0	0	0	**1**
Y	21	11	10	12	0	0	1	**55**
PLG	71	44	77	93	5	2	14	**306**
RWF	6	4	8	6	0	0	0	**24**
TOTAL	**394**	**241**	**439**	**644**	**31**	**21**	**101**	**1871**
%	21.1	12.9	23.5	34.3	1.7	1.1	5.4	100

Table 3. Division of tooth type by grave. I=permanent incisor; C=permanent canine; PM=permanent premolar; M=permanent molar; i=deciduous incisor; c=deciduous canine; m=deciduous molar.

3.2. Number of Individuals

The minimum likely number of individuals (MLNI) of the Ismenion Hill population is 210. There were 157 individuals that were identified from loose teeth that were not associated with specific individuals, and 53 individuals who were identified as specific individuals as determined during excavations (Table 4). It was ensured that loose teeth that were associated with specific individuals were not mixed with other loose teeth by keeping them separate and stored in labelled bags with the individual they belong to. However, it should be noted that loose teeth not originally marked as part of an individual *could* belong to an identified person but that context was lost in the burial environment, during excavation or even in storage. The Parking Lot Grave (PLG) had the highest MLNI with 35 (16.7%) individuals, while Graves 10, 18, and X only had one individual present based on the dentition.

Grave	**Matched Pairs**	**Repeated Loose Teeth**	**Individuals with *in situ* Teeth**	**TOTAL**	**Percent (%)**
4	5	3	3	**11**	5.2
5	12	5	0	**17**	8.1
9	10	9	0	**19**	9.0
10	0	1	0	**1**	0.5
12	2	4	4	**10**	4.8
18	0	1	0	**1**	0.5
19	0	1	10	**11**	5.2
20	3	2	8	**13**	6.2
X	0	1	0	**1**	0.5
25	7	3	3	**13**	6.2
26	0	1	4	**5**	2.4
27	5	7	2	**14**	6.7
34	1	0	0	**1**	0.5
38	4	4	9	**17**	8.1
40	1	1	1	**3**	1.4
41	7	1	1	**9**	4.3
42	1	0	0	**1**	0.5
43	0	0	1	**1**	0.5
45	12	5	0	**17**	8.1
46	0	1	1	**2**	1.0
Y	3	4	0	**7**	3.3
PLG	20	10	5	**35**	16.7
RWF	0	0	1	**1**	0.5
TOTAL	**93**	**64**	**53**	**210**	100

Table 4. MLNI per grave based on pair matching, loose teeth and individuals with *in situ* teeth.

3.3. Age-at-Death

From Ismenion Hill, 126 (60%) of the 210 individuals present had undeveloped dentition and were able to be aged following the London Atlas of Tooth Development (LATD). Loose teeth not associated with specific individuals were assessed by dental development, while *in situ* teeth in mandibles and maxillae were evaluated using dental development and eruption. Ages ranged from 38 weeks *in utero* to 16.5 years (Table 5). The most common age-at-death was 4.5 years with 14 (11.1%) individuals, followed by 5.5 years with 13 (10.3%) individuals and 6.5 years with 12 (9.5%) individuals (Figure 14). The majority of the non-adults (80.3%) died after one year of age. Overall, 99 individuals died in infancy, 33 died as a juvenile and 1 died in adolescence (Table 6). Consequently, there is a high infant mortality with over half (51%) of the population at Ismenion Hill dying during infancy.

Age	Number of Individuals	Percent (%)
38 weeks *in utero*	1	0.8
1.5 months	4	3.2
2.5 months	0	0.0
3.5 months	0	0.0
4.5 months	8	6.3
5.5 months	0	0.0
6.5 months	0	0.0
7.5 months	7	5.6
8.5 months	0	0.0
9.5 months	0	0.0
10.5 months	5	4.0
11.5 months	0	0.0
1.5 years	6	4.8
2.5 years	7	5.6
3.5 years	8	6.3
4.5 years	14	11.1
5.5 years	13	10.3
6.5 years	12	9.5
7.5 years	9	7.1
8.5 years	6	4.8
9.5 years	6	4.8
10.5 years	4	3.2
11.5 years	6	4.8

Age	Number of Individuals	Percent (%)
12.5 years	2	1.6
13.5 years	6	4.8
14.5 years	1	0.8
15.5 years	0	0.0
16.5 years	1	0.8
TOTAL	**126**	100

Table 5. Number of individuals by age-at-death based on dental development and eruption following the LATD.

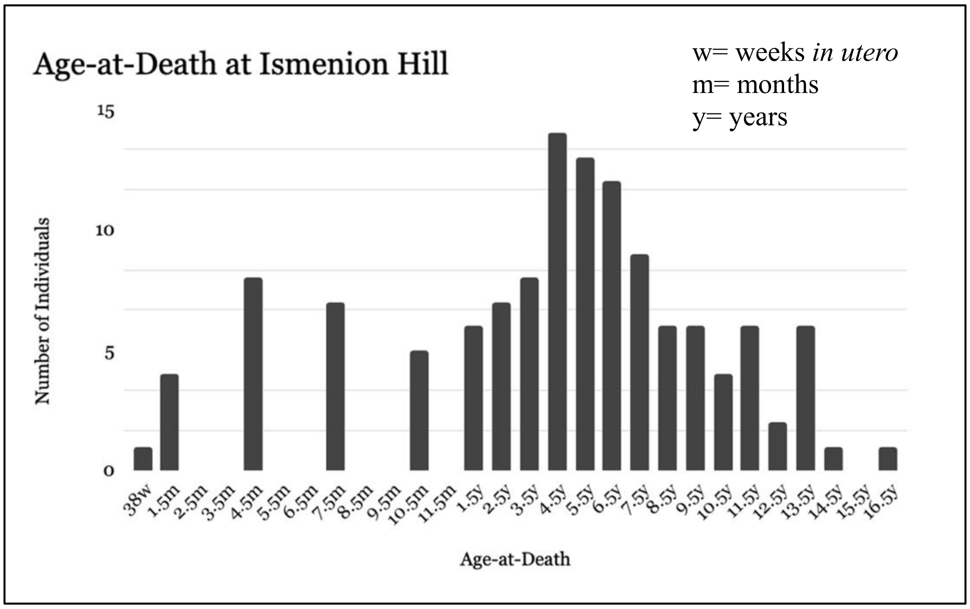


Figure 14. Number of individuals by age-at-death based on dental development and eruption following the LATD.

Age Category	Number of Individuals	Percent (%)
Infancy (birth-7.5 years)	94	74.6
Juveniles (7.6-14.5 years)	31	24.6
Adolescence (14.6-20.5 years)	1	0.8

Table 6. Number of individuals per age category based on dental development and eruption following the LATD.

3.4. Dental Wear

There are 910 (48.6%) incisors, canines and premolars that were scored following Smith (1984) (Table 7). The most common wear stage was three with 237 (26.0%) teeth having a "dentine line of distinct thickness [or] full cusp removal" (Smith 1984: 46). Another 186 (20.4%)

teeth were scored with wear stage four, and 172 (18.9%) teeth with wear stage two. The least common wear stage was eight, with only eight (0.9%) teeth having "complete loss of crown" (Smith 1984). There were more teeth with lower wear scores, with 670 (73.6%) teeth scoring four or below, and 240 (26.4%) teeth scoring five or above (Figure 15). It should be noted that number of individuals were not calculated for wear stages as dental wear is variable within the mouth and, therefore, difficult to assign a single wear stage to an individual. As well, not all teeth were able to be assessed for wear due to taphonomic, preservation, and pathological conditions.

Grave	**Wear Score**								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**TOTAL**
4	8	22	3	7	3	5	6	0	**54**
5	11	1	11	14	11	3	0	0	**51**
9	14	14	9	7	7	3	0	0	**54**
12	1	13	21	25	0	0	1	0	**61**
19	3	14	33	13	16	2	0	0	**81**
20	4	19	37	13	5	1	0	0	**79**
25	3	11	4	2	3	1	1	4	**29**
26	1	16	14	4	2	2	1	1	**41**
27	12	8	8	9	16	3	2	0	**58**
34	0	0	0	0	0	1	0	0	**1**
38	0	8	28	15	11	20	6	2	**90**
40	1	12	7	2	0	0	2	0	**24**
41	0	8	10	6	1	0	1	0	**26**
42	0	0	4	0	0	0	0	0	**4**
43	0	0	1	3	3	3	0	0	**10**
45	5	2	8	10	2	2	0	0	**29**
X	0	0	0	0	0	0	0	0	**0**
Y	3	6	11	5	7	4	3	0	**39**
PLG	9	18	28	46	38	18	4	0	**161**
RWF	0	0	0	5	5	4	3	1	**18**
TOTAL	**75**	**172**	**237**	**186**	**130**	**72**	**30**	**8**	**910**
%	8.2	18.9	26.0	20.4	14.3	7.9	3.3	0.9	100

Table 7. Division of wear sum scores following Smith (1984) per grave.

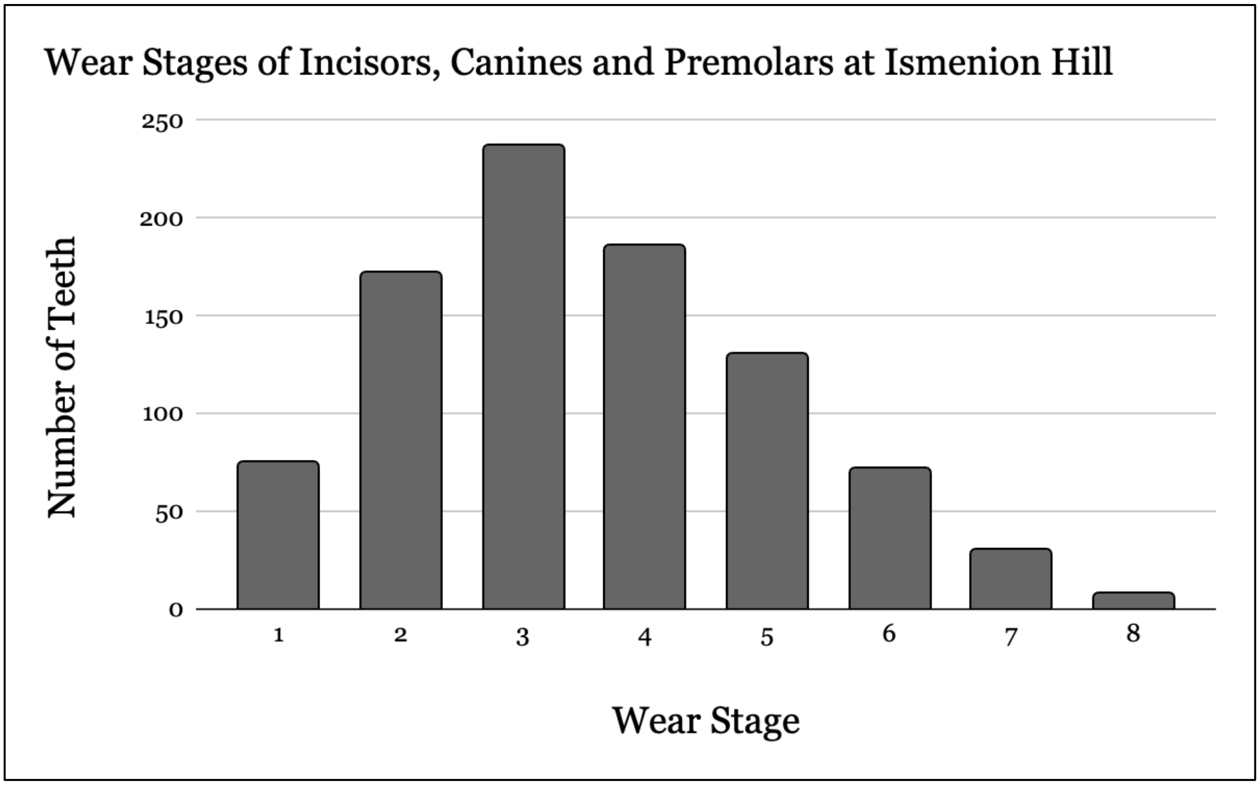


Figure 15. Number of teeth per wear stage following Smith (1984).

There were 554 (29.6%) molars that were assessed for wear score sums following Scott (1979) (Table 8). The most common quadrant wear score was four, and the most common wear score sum fell between 17 and 20, with 103 (18.5%) teeth. Quadrant score one with sum scores falling between five and eight, and quadrant score two with sum scores falling between nine and twelve, were also common, each with 101 (18.2%) teeth. Overall, there were more molars with lower wear sum scores than there are with higher scores, with 393 (70.9%) teeth with sum scores of 20 or below, and 161 (29.1%) teeth with scores of 21 or above (Figure 16). Thus, there appeared to be more young adults present at Ismenion Hill than older adults, as there was a higher prevalence of lower wear scores.

Grave	Wear Sum Score										
	0-4	**5-8**	**9-12**	**13-16**	**17-20**	**21-24**	**25-28**	**29-32**	**33-36**	**37-40**	**TOTAL**
4	0	7	5	2	13	2	0	1	1	0	**31**
5	1	7	8	2	6	5	1	0	1	0	**31**
9	8	17	7	2	2	6	1	0	0	0	**43**
12	0	0	13	10	5	0	4	0	0	0	**32**
18	0	0	0	1	0	0	0	0	0	0	**1**
19	0	19	8	2	10	6	2	3	4	2	**56**
20	0	16	9	6	10	11	4	0	0	0	**56**
25	0	5	9	2	1	0	1	0	0	0	**18**
26	1	1	3	11	10	1	0	1	0	0	**28**
27	2	3	6	4	9	16	2	0	0	4	**46**
38	0	2	8	6	7	11	10	4	3	2	**53**
40	0	4	3	1	2	0	0	0	0	0	**10**
41	0	4	0	0	0	0	0	0	1	3	**8**
42	0	0	0	2	0	0	0	0	0	0	**2**
43	0	0	0	1	1	3	0	0	0	0	**5**
45	5	2	9	7	5	3	0	1	0	0	**32**
X	0	0	0	0	0	1	0	0	0	0	**1**
Y	0	2	4	0	1	1	0	0	1	3	**12**
PLG	4	11	9	8	20	13	8	0	4	6	**83**
RWF	0	1	0	0	1	2	2	0	0	0	**6**
TOTAL	**21**	**101**	**101**	**67**	**103**	**81**	**35**	**10**	**15**	**20**	**554**
%	3.8	18.2	18.2	12.1	18.6	14.6	6.3	1.8	2.7	3.6	100

Table 8. Division of wear sum scores following Scott (1979) per grave.

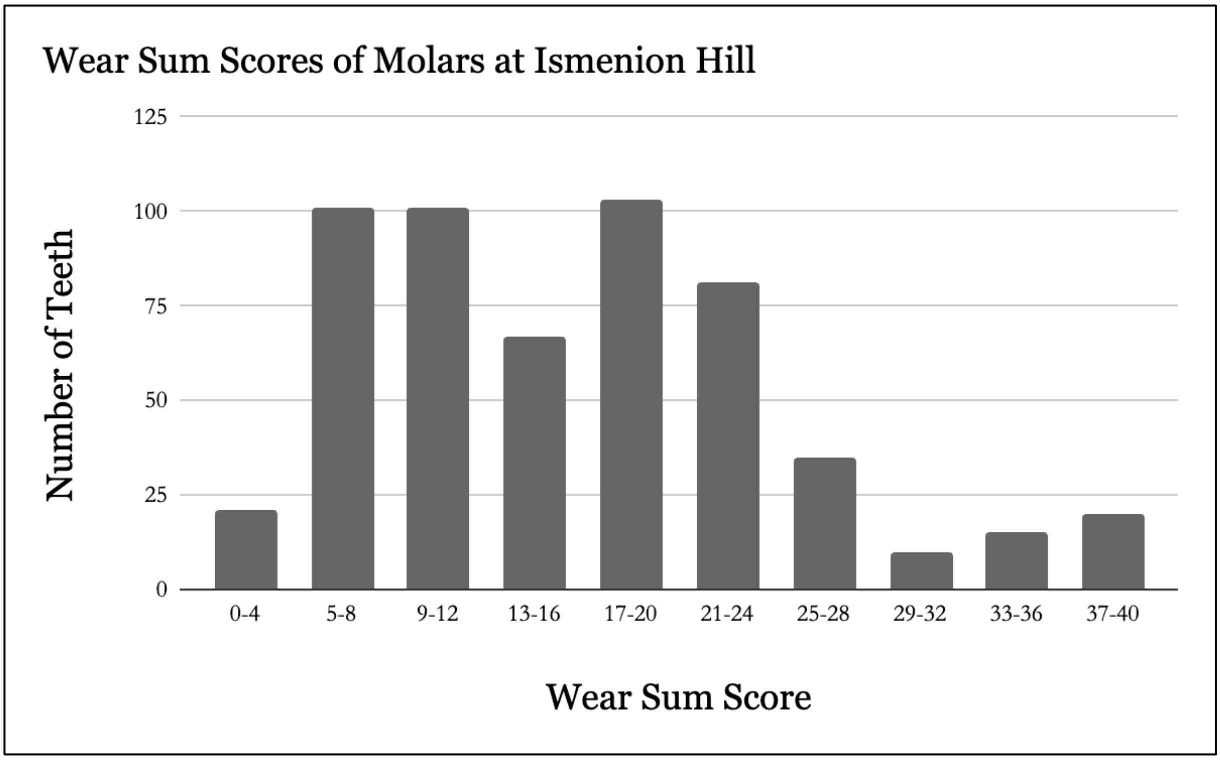


Figure 16. Number of teeth per wear stage following Scott (1979).

3.5. Dental Non-Metrics

The dental collection of Ismenion Hill presented four dental non-metric traits. There were 26 (12.4%) individuals with Carabelli's cusps, appearing on maxillary molars (Figure 17). Eleven (5.2%) people had shovel shaped incisors, occurring on maxillary and mandibular central and lateral incisors (Figure 18). Two (1.0%) individuals had buccal enamel folds (Figure 19), and one (0.5%) person had a pegged-shaped root (Figure 20).

Figure 17. Example of a Carabelli's cusp (red arrow) found on a RM^3.

Figure 18. Example of shovel-shaped LI^1.

Figure 19. Example of an enamel fold on a LI^2 (red arrow).

Figure 20. The pegged-shaped incisor from Grave 25.

3.6. Dental Calculus

Dental calculus was found on 128 (6.8%) loose and *in situ* teeth (Table 9). A majority of the teeth with calculus (79.7%) were from individuals with preserved mandibles and maxillae. Calculus appeared on all tooth areas, except the occlusal surface, and ranged from small calcifications on the crown (Figure 21) to coverage of the whole crown with extension on the root (Figure 22), and was seen varying within an individual (Figure 23).

Grave	Number of Teeth	Percent (%)
4	20	15.6
9	1	0.8
12	2	1.6
19	43	33.6
20	33	25.8
25	4	3.1
26	7	5.5
27	7	5.5
41	8	6.3
X	1	0.8
PLG	2	1.6
TOTAL	**128**	100

Table 9. Number of teeth with dental calculus by grave. Graves with no calculus were excluded.

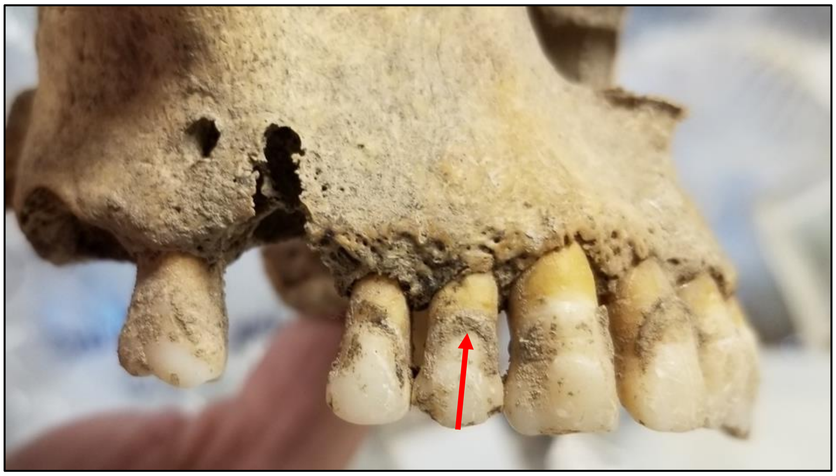


Figure 21. Example of light dental calculus (red arrow) found on Skeleton 2 ("Largest Male"), Grave 20.

Figure 22. Example of heavy dental calculus covering a majority of the crown surface found on the "Youngest Adult", Grave 19.

Figure 23. Mandible of Skeleton 2 ("Largest Male"), Grave 20, with heavy calculus on the anterior teeth and light calculus on the distal teeth.

3.7. Dental Pathologies

3.7.1. Dental Caries

Dental caries were found on 107 (5.7%) loose and *in situ* teeth (Table 10). Caries ranged in size from large, deep holes to small pits, and were seen on all surfaces of the tooth crown and root, which is rather unusual as caries are most commonly isolated to the crown (Hillson 1996) (Figures 24 and 25). Of these, five (4.8%) teeth had multiple caries present on a single tooth (Figure 26). Additionally, eight individuals with associated maxilla and mandibles had abscesses likely resulting from tooth infections (Figure 27).

Grave	**Number of Teeth**	**Percent (%)**
4	4	3.7
5	2	1.9
9	2	1.9
10	1	0.9
12	6	5.6
19	7	6.5
20	4	3.7
25	6	5.6
26	7	6.5
27	10	9.3
38	10	9.3
40	1	0.9
41	1	0.9
43	1	0.9
45	15	14.0
Y	4	3.7
PLG	24	22.4
RWF	2	1.9
TOTAL	**107**	100

Table 10. Number of teeth with caries by grave. Graves with no caries were excluded. Abscesses were excluded in this table.

Figure 24. Example of large caries on occlusal surface.

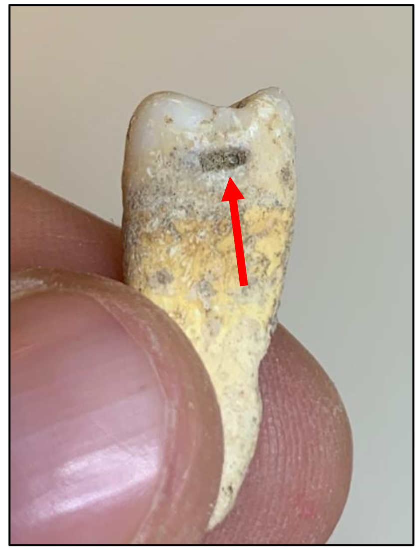


Figure 25. Example of small caries (red arrow) on mesial surface.

Figure 26. Mandible of "Youngest Adult", Grave 19, with abscess under RM_1.

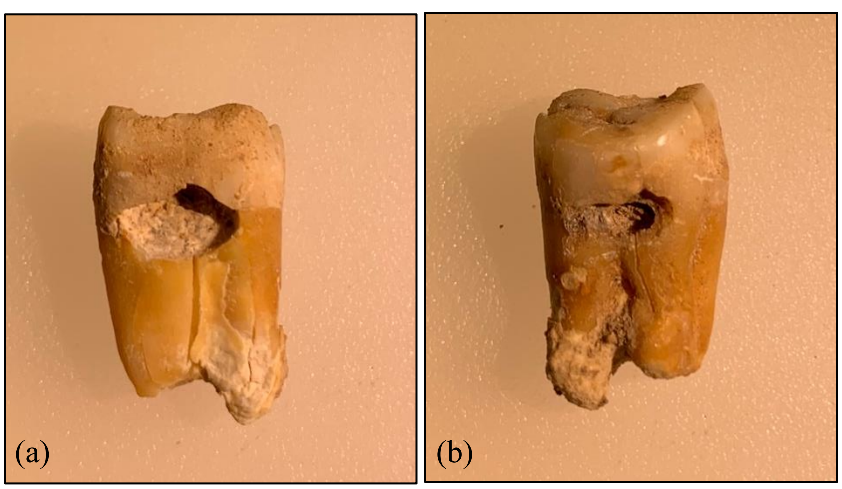


Figure 27. An LM^3 with caries on the (a) mesial side and (b) distal side.

3.7.2. Periodontal Disease

Furthermore, 24 (11.4%) individuals with associated mandibles and maxillae exhibited periodontal disease (Table 11; Figure 28). Periodontal disease is the resorption of the alveolar bone at the CEJ (Lavigne & Molto 1995), and thus can only be assessed for *in situ* teeth. While this is not a pathology of the tooth, it does indirectly affect teeth through increased surface exposure which can lead to the development of dental calculus and caries.

Grave	Number of Individuals	Percent (%)
4	1	4.3
12	3	13.0
19	4	17.4
20	4	17.4
25	1	4.3
26	1	4.3
38	3	13.0
41	1	4.3
46	1	4.3
PLG	4	17.4
TOTAL	**23**	100

Table 11. Individuals with *in situ* teeth exhibiting periodontal disease by grave. Graves with no periodontal disease were excluded.

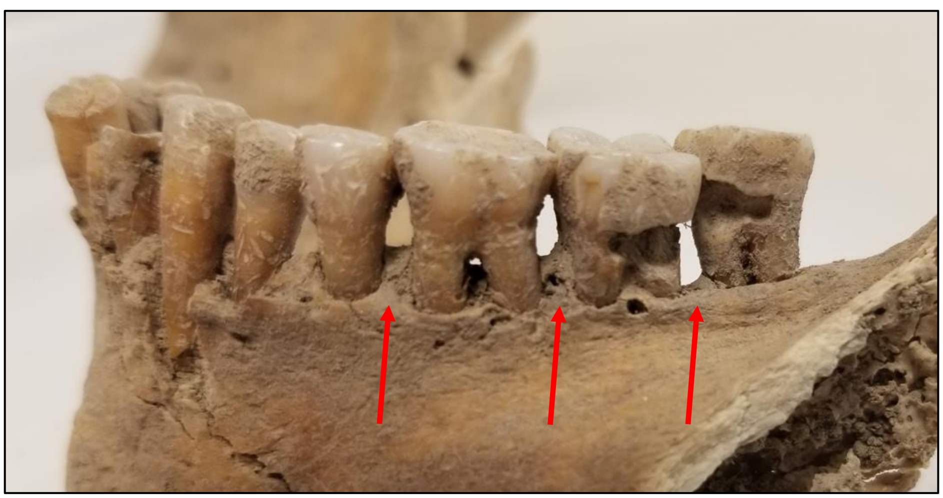


Figure 28. An individual from Grave 25 with resorbed alveoli (red arrows) indicative of periodontal disease.

3.7.3. Short Root Anomaly

Short Root Anomaly (SRA) was identified at Ismenion Hill in two (1.0%) individuals. This pathology is characterized by short, blunted, yet fully complete roots with regular crowns (Valladares Neto et al. 2013). There were four teeth with this pathology. Three came from one individual (RI^1, $PM_?$ and PM?) (Figure 29) in Grave 5, and a LI^1 (Figure 30) from an individual in Grave 9.

Figure 29. (a) RI^1, (b) $PM_?$ and (c) PM? with SRA from Grave 5.

Figure 30. LI^1 from Grave 9 with SRA.

3.7.4. Enamel Notch

Moreover, in Grave 12, there is a RI^1 with a notch in the enamel on the mesial side, curving about 3mm into the buccal side (Figure 31). This was not listed as a non-metric trait in the ASUDAS, and may be the result of trauma (Goenka et al. 2010; Goenka et al. 2011).

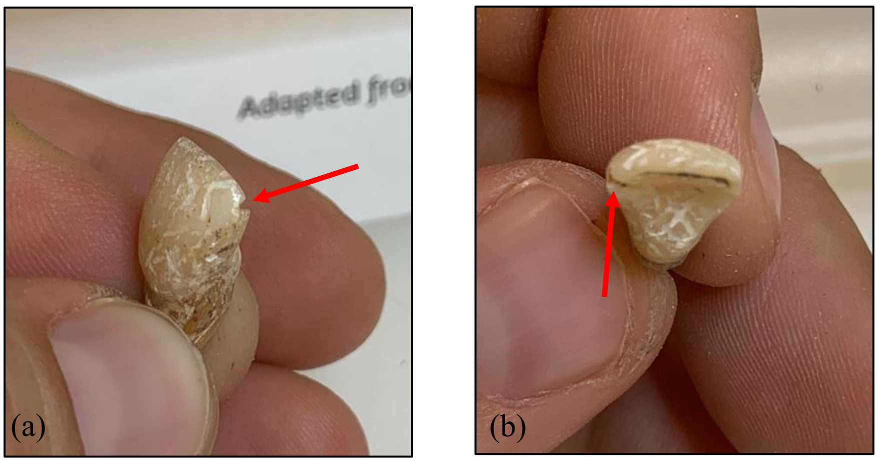


Figure 31. RI^1, Grave 12, with enamel notch (red arrow) (a) appearing on mesial side and (b) curving into the buccal side.

3.6.5. Linear Enamel Hypoplasia

Linear enamel hypoplasia (LEH) was observed on 324 (17.3%) teeth, from 85 (40.5%) individuals, with 565 individual LEH bands (Table 12). Thus, 40.5% of the population at Ismenion Hill had at least one LEH. Most LEH occurred on permanent canines (31.3%), followed by incisors (29.4%), premolars (22.0%) and molars (14.2%) (Appendix C, Table 3). This is a typical distribution of LEH as the bands are less visible on the premolars and molars as the geometry of the incisors and canines makes the LEH bands more apparent (Ogden 2007). There was one deciduous rc_1 from the PLG with a LEH line present. Unfortunately, the photo of the tooth does not adequately highlight the LEH band. At times, LEH was seen in multiple adjacent teeth within the same individual. An example of this was seen with Skeleton D, or “Second Largest Male”, from Grave 20. This individual had a preserved mandible and maxilla with every tooth present having at least one LEH line that appears on multiple teeth that were formed at the same time (Figure 32). This suggests that there was a stress event, or series of events, that impacted multiple teeth at once. As well, many teeth had multiple LEH bands. At most, there were four people with five bands and one individual with six (Figure 33).

Grave	**Number of Individuals**	**Percent (%)**
4	2	2.4
5	5	5.9
9	8	9.4
12	6	7.1
19	9	10.6
20	7	8.2
25	2	2.4
26	3	3.5
27	4	4.7
38	10	11.8
40	2	2.4
41	5	5.9
45	4	4.7
46	1	1.2
Y	2	2.4
PLG	15	17.7
TOTAL	**85**	100

Table 12. Number of individuals with LEH by grave. Graves without LEH were excluded.

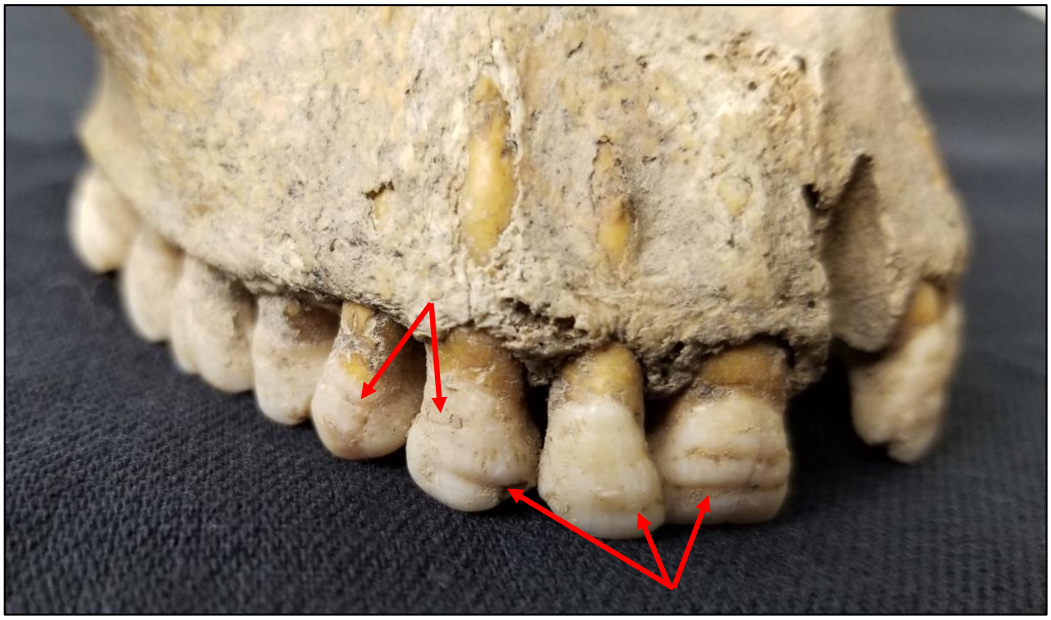


Figure 32. Maxilla of Skeleton D ("2nd Largest Male"), Grave 20, with visible LEH bands that can be traced to the adjacent teeth (red arrows).

Figure 33. LC_1 from PLG with six LEH bands (red arrows).

The LEH measurements were converted to age-at-deposition estimations using equations established by Goodman and Rose (1990). Unfortunately, as this method did not include equations for third molars, only 508 (90.0%) of the 565 LEH bands observed were converted to age estimations (Table 13). The most common ages for the development of an LEH band was later in childhood, between 4 and 4.99 (28.1%) years, followed by 3-3.99 (25.4%) years and 2-2.99 (24.2%) years (Figure 34). Three individuals had LEH bands that formed during the fetal stage, with the youngest being deposited at 6 months *in utero*. Interestingly, all three individuals died at 6.5 years of age. The latest LEH band for all individuals developed at 6.8 years.

Age Range (years)	**Number of LEH Bands**	**Percent (%)**
in utero	3	0.6
0-0.99	4	0.8
1-1.99	35	6.9
2-2.99	123	24.2
3-3.99	129	25.4
4-4.99	143	28.1
5-5.99	46	9.1
6-6.99	25	4.9
TOTAL	**508**	100

Table 13. Number of LEH bands per age range.

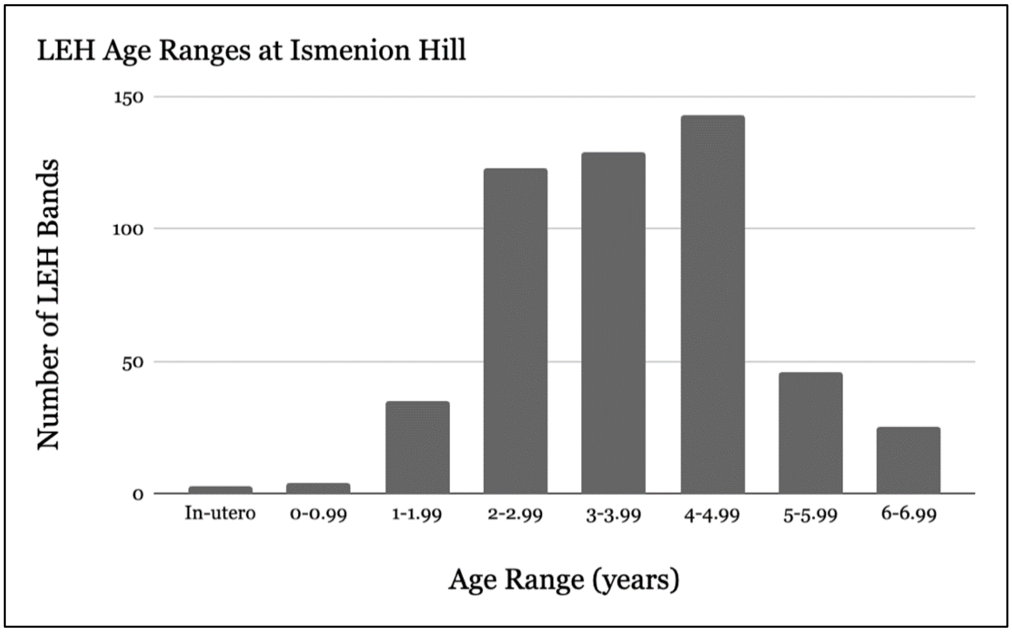


Figure 34. Number of LEH bands per age range, demonstrating the greater amount of LEH in the later years.

CHAPTER 4: DISCUSSION

The results of this research were reviewed against the cultural context of Byzantine Greece to help understand the characteristics of the dental remains. This provided valuable insight into the lifeways and experiences of the population at Ismenion Hill.

4.1. Number of Individuals

Notably, the results of this dental analysis did not directly match the bone examination (Liston 2017; Liston 2023 personal communication). The dentition indicated there were at least 210 individuals buried at the Ismenion Hill, while the bones suggested 184 individuals (Liston 2017), giving a discrepancy of 26 people. This could be accounted for by those individuals with mixed dentition. Otherwise, it could be due to the fact that teeth are more likely to survive into the archaeological record as they are the hardest material in the body, being comprised mainly of inorganic material that is highly resistant to decomposition and taphonomic processes (Cassman & Odegaard 2006; de Dios Teruel et al. 2015). Thus, teeth are more likely to present a higher and more accurate number of individuals present than one based on bones themselves (Ghazi 1994; Roberts & Manchester 2005). Furthermore, the bone analysis indicated that the population contains more adults than non-adults (Liston 2017), while the dental analysis suggests the opposite. This difference could be again caused by teeth's ability to survive in the burial environment, and the frailty of non-adults bones, often leading them to be lost during burial, (Kamp 2001; Mays 1998; Manifold 2012), due to excavation processes (Scheuer & Black 2004; Manifold 2012), and storage methods (Holland et al. 1997; Manifold 2012; Manifold 2013). Consequently, the dental record should be given greater weight when determining the number of people present at Ismenion Hill, however, the bone analysis should not be disregarded, but rather used to support this conclusion. It must be noted that this dental analysis does have its limitations when determining MLNI. While the MLNI in this study was carefully assessed to ensure the highest accuracy possible, it is ultimately very difficult to determine the correct number of people present from dentition as it can never truly be known what teeth belong to the same individual. The dental collection of Ismenion Hill is especially challenging as most of the teeth examined (62.0%) were co-mingled and completely separate from any context except for a grave association. Further, many of the burials at Ismenion Hill were disturbed, with the upper portion of the skeletons removed from the site in antiquity. So, the number of individuals determined from teeth alone, could unintentionally exclude individuals with no surviving dentition. Therefore, while it was determined that 210 people were buried at the site, this number must be used with the acknowledgement of the study's limitations.

4.3. Dental Calculus

The prevalence rate of dental calculus at Ismenion Hill is 6.7%, which is lower compared to other contemporary sites with a majority (71.4%) having a prevalence rate over 20% (Table 14; references within). This discrepancy could be due to the fact that most of the teeth at Ismenion Hill were loose in the grave and were stored in large bags often containing more than 30 individual teeth. These situations can cause parts of the calculus to be nicked off in the burial and in storage, thus lowering the actual prevalence of calculus (Holland et al. 1997; Manifold 2012; Manifold 2013). As well, in Byzantine Greece, physicians advised the public to brush their teeth and gums with dill and white wine in between meals as a preventative measure against the development of dental plaque (Panteleakos et al. 2010). However, the lower prevalence of calculus could indicate the population consumed little animal meat, as it is considered a 'sticky' food that generates large amounts of dental plaque and thus calculus (Larsen 1997; Lieverse 1999; Tritsaroli & Karadima 2017). So, it is suggested that the population at Ismenion Hill relied more heavily on plant foods than meat resources.

4.4. Dental Caries

The prevalence rate of dental caries at Ismenion Hill (5.7%) falls just below the average prevalence of other contemporary Greek sites (8.5%) (Table 14; references within). The low rate of caries can be caused by numerous factors. During this time, many people brushed their teeth as a means of combatting the development of caries (Panteleakos et al. 2010). Additionally, as majority of the population at Ismenion Hill died as non-adults, it is possible that there was not enough time for caries to develop before death (Veiga et al. 2016). As well, caries can weaken the tooth structure making it more susceptible to breakage in the burial environment and in storage (Krawcyzk et al. 2014). Further, the occurrence of caries could be an indicator of subsistence practice, based on the understanding that the transition from hunter-gatherer to agricultural systems increased the rate of dental caries (Lukacs 1996; Larsen 1997; Hillson 2023; Tayles et al. 2009; Turner 1978). Accordingly, hunter-gatherer communities have a prevalence between 0-5.3%, while agriculturalists fall within 2.2-26.9%, and a mixed subsistence practice of the two are seen between 0.44-10.3% (Michael et al. 2017; Schollmeyer & Turner 2004; Turner 1978, 1979). Ismenion Hill, falls within each of these ranges, suggesting they practiced a mixed food strategy containing both harvested and domesticated foods, and hunted and gathered resources (See Appendix A; Bintliff 1996, 2012; Kaplan 1992; Tritsaroli et al 2022). This mixed practice was seen throughout Byzantine Greece as determined from historical, archaeological and bioarchaeological analyses (Bourbou & Richard 2007; Dotsika et al. 2018; Kwok 2015; Michael et al. 2017). However, because there are other factors that affect the rate of caries, including hygienic practices and storage methods, any conclusions about diet drawn from the prevalence of caries must be suggestive and considered in light of its limitations.

4.5. Linear Enamel Hypoplasia

The prevalence of LEH present at Ismenion Hill, with 16.9% of teeth having at least one LEH band, nearly matches the average of other contemporary sites within Greece (18.7%) (Table 14; references within). Thus, it appears that the population at Ismenion Hill was not subjected to extraordinary stress during early childhood as their levels were relatively similar to concurrent sites. However, it is difficult to comment on the specific cause of LEH in those that do exhibit it as it is influenced by many factors including diet, disease, genetics, environment and social status (Aufderheide & Rodríguez-Martín 1998; Bereczki et al. 2019; Goodman & Martin 2002; Hillson 1996; King et al. 2005; Larsen 2015; Ortner 2003; Roberts & Manchester 2005; Waldron 2009).

Greek Sites	Calculus Prevalence (%)	Caries Prevalence (%)	LEH Prevalence (%)	Reference
Thebes	44.2	4.0	29.8	Tritsaroli 2006
Pantanassa		21.9		Tritsaroli 2006
Spata		4.5		Tritsaroli 2006
Maroneia	31.1	10.2	17.6	Tritsaroli & Karadima 2017
Akraiphia	28.1	12.5	15.6	Tritsaroli & Karadima 2017
Xironomi	37.1		21.9	Bourbou 2010

Greek Sites	Calculus Prevalence (%)	Caries Prevalence (%)	LEH Prevalence (%)	Reference
Isthmia	32.4	8.0		Rife 2012
Gouriza	73.7	16.6	30.1	Tritsaroli 2019
Orchomenos	57.9	14.9	17.3	Tritsaroli et al 2022
Sourtara Galaniou Kozanis	11.0	4.0		Bourbou & Tsilipakou 2009
Korytiani	21.5	10.7	8.16	Papagerogopoulou & Xirotiris 2009
Eleutherna	4.5	2.9	1.2	Bourbou 2010
Gortyn		2.1		Bourbou 2010
Kastella	19.1	3.3	9.7	Bourbou 2010
Kefali	32.6	8.3	2.1	Bourbou 2010
Stylos	9.1	4.2	2.1	Bourbou 2010
Average	30.9	8.5	14.1	
Ismenion Hill	**6.7**	**5.6**	**16.9**	

Table 14. The dental caries, calculus and LEH prevalence rates at various contemporary Greek sites. Blank boxes indicate rates that were not recorded in the associated study and are, therefore, not known.

4.6. Childhood Mortality

While the low rate of calculus and caries within the population of Ismenion Hill suggests they are orally healthy, there was clearly a high infant mortality rate with majority (74.6%) of individuals dying in infancy. This, evidently, matches other contemporary sites. Bourbou (2010) examined the demography of the Byzantine Greek sites, Eleutherna, Gortyn, Kastella, Kefali, Knossos and Stylos, and noticed that, at each site, over 50% of the dead falling in this age range. Similar results were found at Akraophnio (Tritsaroli & Karadima 2017), Xironomi and Orchomenos (Tritsaroli et al. 2022). Further, as seen in historical journal entries, many physicians advised pregnant women and new parents of the dangers of evil spirits and demons, indicating a high concern with childhood death. A particular worry was the female demon Gylou who, envious of expecting women, was known to cause miscarriages, kill newborns and force mothers to develop postpartum mental and physical illnesses (Greenfield 1988; Hurwitz 1992; Foskolou 2014; Fulghum-Heintz 2003). Another spirit of concern, unnamed, was a half-woman, half-serpent who terrorized pregnant women and newborns (Russell 1995; Vikan 1984). As well, the creature known as the "Wandering Womb" was a disheveled woman with octopus-like features representing the uterus who was responsible for many illnesses women experienced including migraines and skin conditions (Aubert 1989). The only protection against these evil entities was a saint known as the Holy Rider that watched over newborns and their families through the Evil Eye symbol (Dickie 1995; Fulghum-Heintz 2003). Physicians, midwives and extended family members suggested that the parents place above the cradle an amulet of the Holy Ride on one side, and the Evil Eye on the reverse (Koukoules 1951; Meyer 2005; Talbot 1997). Indeed, these amulets have been found in archaeological sites and most commonly in domestic settings (Figure 35) (Foskolou 2014; Fulghum-Heintz 2003). Interestingly, an Evil Eye pendant was found in Grave 20, where 13 of the 18 individuals present were non-adult (Figure 36) (Daly & Larson 2017). Moreover, childhood death was commonly cited in the Byzantine *Vita*'s, which are written records of the lives of saints. For example, the Vita St. Evaristos mentions a father who had lost four consecutive children during birth (van de Vorst 1923), Vita St. Peter of Atroa sees a couple who lost all 13 of their children prematurely (Laurent 1956), and Vita Theodora of Thessaloniki describes a single year in which four children died at the monastery (Paschalides 1996). Other monastic records indicate high child mortality (Laiou 1981, 1985; Patlagean 1973), including one in which over half of the children living on church-owned properties died before the age of five years (Laiou 1977; Patlagean 1977).

Figure 35. Pendant of the (a) Holy Rider, and (b) Evil Eye; Athens, 6-7th century A.D, Athens (Foskolou 2014: 341).

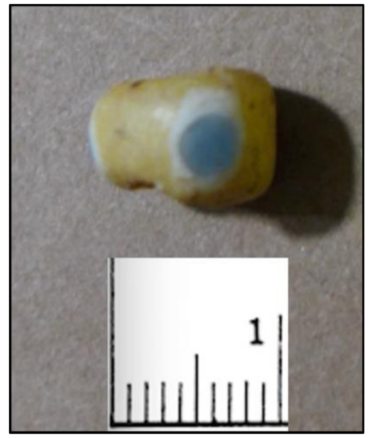


Figure 36. Evil Eye pendant found at Ismenion Hill, Grave 20 (Daly & Larson 2017).

Infant death in Byzantine Greece has been attributed to harmful birthing practices causing trauma to both child and mother, familial social standing, health of the mother, birth disorders and weaning practices (Barker 1992a, 1992b; Barker & Martin 1992; Barker & Osmond 1986; Lewis 2007; WHO 2006). Interestingly, at Ismenion Hill, the common age-at-death (2.0-4.99 years) loosely aligns with the popular age for LEH deposition (3.5-6.5 years) indicating that between the period of two and six years of age, children could have been subjected to stressful events.

The most significant stress event occurring during this time was experienced by almost every child – the weaning from breastmilk to a solid 'adult' diet (Bourbou et al 2013; Katzenbery et al. 1996; Kwok 2007). Much of what is known about Byzantine Greek weaning practices comes from the personal writings of physicians. Soranus of Ephesus wrote the book

Gynaecology to provide the public with proper reproduction methods, birthing practices and weaning customs (Temkin 1991). Oribasius published on the specifics of a newborn's diet (Grant 1997). Galen of Pergamum detailed birthing anatomy and acceptable ways of caring for infants (Bourbou & Richards 2007). Physicians collectively agreed on a general weaning regimen that would ensure the health of the child (Jackson 1989). After birth, the infant was not to be fed by the breast for the first ten days of life, as it was believed that the colostrum was harmful due to its lemony-yellow colour and thicker consistency (Bourbou 2010; Bourbou et al. 2013; Lascaratos & Poulakou-Rebelakou 2003). The replacement for breastmilk during this time was *hydromel*, a mixture of honey and lukewarm water, which was given as a drip throughout the day (Bourbou et al. 2013; Bourbou & Richards 2007). Oribasius adamantly advised against adding heavier foods, such as butter, to this mix, as they were considered too thick for the infant to digest and would remain undigested for an extended period of time (Grant 1997; Orme 2001). After the ten days of hydromel, infants could be breastfed by either the mother or a wet-nurse (Bourbou 2010; Bourbou et al. 2013). While nursing, women were to consume mainly domestic animal protein and fish to ensure the quality of milk being produced. It was then recommended that infants should begin weaning off breastmilk between six and 20 months in age (Bourbou et al. 2013; Temkin 1991). However, if the infant became ill during this time, weaning must cease and they were to continue on breastmilk (Bourbou et al. 2013; Temkin 1991). Most physicians, including Soranus, Oribasius, Paul of Aegina and Aetius of Amida, advised that the first food introduced to an infant was hydromel mixed with bread crumbled and softened with wine or goat's milk, as cow's milk was considered dangerous. This mixture was to be moistened enough that the infant could drink it (Bourbou 2010). After a couple of months, infants were given a soup made of porridge, or an egg softened so it could be sipped (Bourbou 2010; Temkin 1991).

When teeth developed, around 18-24 months of age, the child was given cereals to eat (Temkin 1991). It was heavily cautioned, however, that breastmilk was not to be abruptly ceased while other foods were introduced (Jackson 1989; Katzenberg et al. 1996; Orme 2001).

The age at which breastmilk was fully removed from a child's diet was not strict, with literary and bioarchaeological evidence indicating weaning could cease anytime between two and six years of age. Most literary evidence for the termination of weaning is found in the *Vita*'s. The Vita of St. Thekla describes a child who at 18 months was walking and refusing milk (Dagron 1978). Vita of Symoen Stylites the Younger professes that he refused his mother's milk at two years (van de Ven 1962). Vita of St. Alypois mentions a three year old child who had recently stopped breastfeeding (Delehaye 1923), while Vita of Basil the Younger references a sick mother and child of four years who was still being breastfed (Vilinskij 1911).

Bioarchaeological evidence for the cessation of weaning comes mainly from stable isotope analysis. In essence, weaning analysis examines the isotope values of nitrogen-15 (^{15}N) and carbon-13 (^{13}C), both of which are highly concentrated in breastmilk and will therefore be elevated during periods of breastfeeding. Scholars regard the period in which these values drop and stabilize at lower rates as the marked end of breastfeeding (Fogel et al. 1989; Fuller et al. 2006; Katzenberg et al. 1993; Kwok 2015). Stable isotope analysis was first used as a means of understanding weaning by Holt (2009) who examined the Greek colony of Apollonia and saw elevated isotope values well into the fourth year of life. Pennycock (2013) received similar results at the sites of Stymphalos and Zaraka, with isotope rates dropping between ages three and four years. Bourbou and colleagues (Bourbou et al. 2013; Bourbou & Garvie-Lok 2009) analyzed eight Byzantine Greek sites (Servia, Petras, Nemea, Eleutherna, Messene, Soutara, Stylos and Kastella) and discovered that the majority of individuals studied had evaluated rates into the fourth year of age. However, they also found that a few children had no elevated values of ^{15}N and ^{13}C indicating they were never breastfed, which might explain their premature deaths. As well, at the site of Eleutherna, there were two individuals with high values up until the age of six years indicating a prolonged period of weaning (Bourbou 2010). Finally, Kwok (2017) researched the Byzantine site of Nemea and found that the isotope values lowered between the ages of two and five years. Evidently, literary and bioarchaeological studies suggest that weaning began as early as six months and continued as long as six years.

Some of these Byzantine customs of infant care and weaning were dangerous, resulting in child death and perhaps causing the high infant mortality rate seen at Ismenion Hill and across Greece. First, the denial of the colostrum to newborns was detrimental to infant health as this substance contains over 200 constituents that develop the immune system and stabilize the digestive tract after birth (Lascaratos & Poulakou-Rebelakou 2003). Without the colostrum, infants were left vulnerable to infections, malnutrition and physiological stress (Bourbou 2010; Bourbou et al. 2013; Lascaratos & Poulakou-Rebelakou 2003). Moreover, the use of honey as the replacement of colostrum and breastmilk during weaning periods was harmful. Unprocessed honey was often contaminated with spores of *Clostridium botulinum*, the bacteria that causes botulism, a severe and deadly form of food poisoning. Botulism blocks the transmission of chemical signals from the brain to neuromuscular clusters, which causes difficulties in latching during breastfeeding often leading to malnutrition. If left untreated, it can cause respiratory paralysis resulting in death (Arnon et al. 1979; Bourbou 2010; Fairgrieve & Molto 2000; Nevas et al. 2005; Shapiro et al. 1998). Furthermore, the addition of goat's milk in weaning foods had severe health implications for children. Byzantine Greeks believed goat's milk was equal in quality to human's milk and was therefore a common replacement. However, goat's milk is very low in folic acid (vitamin B_9) and cobalamin (vitamin B_{12}), and the reliance on it, instead of human milk, often lead to severe vitamin deficiencies causing megaloblastic anemia (Bourbou 2010; Chanarin 1990; Fairgreive & Molto 2000). Ultimately, these dangerous practices contributed to the poor health of infants and juveniles, and accordingly raised the child mortality rate.

4.7. Leprosy at Ismenion Hill

A goal of this study was to identify any dental evidence for leprosy as the assessment of the bones of Ismenion Hill indicate at least 21 individuals suffered from the disease (Liston 2017). The prevalence of leprosy (11.4%) and the presence, and co-occurrence, of other diseases, including metastatic cancer, brucellosis and childhood leukemia, suggest that Ismenion Hill was once the cemetery of an early form of a hospital (Liston 2017; Liston 2023 personal communication). Hospitals in the early years of Byzantine Greece, were religious institutions that tended to the sick, providing rudimentary care consisting of shelter, warmth and basic foods (Miller 1997; Miller & Nesbitt 2023; Liston 2023 personal communication). In these early times of Christianity, it was believed that leprosy was a 'Holy Disease' and that lepers were marked by God to be destined for heaven, as God was seen caring for and curing lepers. Because of this close relationship between God and leprosy, those infected with the disease often took pilgrimage to religious institutions to received aid. Church buildings, including monasteries, acted as hospitals, in that they provided a place for the ill to stay and be closed to God (Miller 1945). In these ancient times, leprosy was not fully understood or diagnosed properly, so many with similar symptoms or skin diseases travelled to clerical institutions seeking comfort (Blondiaux et al. 2016; Kyriakis 2010; Roffey & Tucker 2012). Therefore, it is suggested that those buried at Ismenion Hill could have once travelled to its associated monastery seeking care or a cure at the hands of God (Liston 2023, personal communication).

Caused by the bacterial infection of *Mycobacterium leprae*, leprosy attacks the peripheral nerves, the upper and lower dermis layers, mucosa of the upper respiratory tract, the eyes, and the skeleton (Barreto et al. 2017; Khudaverdyan et al. 2021; Manchester & Roberts 1989; Santacroce et al. 2021). Leprosy eventually affects the teeth in its most severe form with five main symptoms that can be seen in the dentition: 1) periodontal disease, 2) antemortem tooth loss (AMTL), 3) dental caries, 4) dental calculus, and 5) uneven dental wear (Ogden & Lee 2008). Periodontal disease is the resorption of the alveolar bone surrounding the dentition. With leprosy, this resorption is expedited as the infection disrupts the bone remolding cycles and increases the presence of osteoclasts and rate of osteolytic osteocytes (Cortela et al. 2015; Nah et al. 1985). The concentration of *M. leprae* in the mouth causes degeneration of the alveolar bone surrounding the teeth (Ogden & Lee 2008; Raja et al. 2016). Further, antemortem tooth loss (AMTL) is a common symptom of leprosy. The leprous bacteria introduces granulomatous tissues into the dental pulp, developing first in the anterior teeth and then spreading to the distal molars. The granulomas in the pulp often build osmotic pressure in the tooth which, when released, develops a carie in the tooth and an abscess in the bone. This is followed by expulsion, once the pulp is no longer circulating the tooth is considered dead and it consequently falls out. The tooth socket in the alveolus is then filled and smoothed with woven bone over time. AMTL can also be caused by advanced periodontal disease, where the alveolar bone is resorbed so deeply that the tooth cavity completely recedes and the tooth subsequently falls out (Garrington & Crump 1968; Ogden & Lee 2008; Roberts & Manchester 1983). Moreover, large dental caries are often associated with leprosy as the granulomas in the tooth pulp and the leprous bacteria in the oral cavity increase the prevalence of caries. As well, leprosy commonly damages the facial nerves leading to full or partial facial paralysis causing food to likely remain stuck in the teeth and create caries, often on the buccal side of the molars (Garrington & Crump 1968; Guo et al. 2017; Ogden & Lee 2008). Interestingly, modern studies of leprosy have indicated a positive correlation between bad oral hygiene and the disease, suggesting that the prevalence of caries in leprosy patients is a result of poor hygiene habits (Singh et al. 2022). Furthermore, dental calculus is a common repercussion of advanced leprosy. Facial paralysis often causes food to remain trapped on the buccal side of the distal teeth as the cheek muscles cannot be used to move the food around and out of this area. This trapped food develops into dental plaque and, overtime, continues to build. The dental plaque is then molded by the soft cheek tissues, the continuous food build-up and the intermixture of heavy saliva, and creates a unique form of dental calculus that bulbs out from the crown of the tooth. Molars are most commonly affected by this form of calculus as they are always pressed against the cheek where food, saliva, and bacteria concentrate (Esker & Via 1969; Garrington & Crump 1986; Khudaverdyan et al. 2019; Ogden & Lee 2008). Dental calculus is then exponentiated by poor oral hygiene (Ogden & Lee 2008; Singh et al. 2022). Finally, the facial neruomuscular damage caused by leprosy often prevents areas of the jaw from being used in masticatory activities. When only one area of the jaw can be used for chewing, it creates an unique wear pattern with heavier wear on the region most used and lighter wear on the other areas. This can occur between the left and right side, or the anterior and distal teeth (Brenner & Touati 2021; Khudaverdyan et al. 2021; Roberts & Manchester 1983).

It must be noted that uneven dental wear can be caused by many factors including continuous use in activities (Lukacs & Pastor 1988; Molnar 2008; Rodrigues et al. 2012), repetitive presence of a hard foreign object, such as pipes and toothpicks (Estalrrich et al. 2016; Indriati & Buikstra 2001; Monaco et al. 2022), and intentional dental modification (Burnett 2017; González et al. 2010; Smith-Guzmán et al. 2020). Therefore, there is a possibility that the uneven dental wear seen at Ismenion Hill is not due to leprosy.

Interestingly, there is a proposed correlation between leprosy and linear enamel hypoplasia (LEH). The underlying theory is that while individuals are in a period of physiological stress and developing LEH, they are vulnerable and more susceptible to contracting infectious diseases, including leprosy. Boldsen (2005, 2009) found a slightly positive connection between LEH and leprosy infections in adults from Medieval Denmark, however, it was not an interdependence of the two pathologies, but rather shared immunological factors, where individuals exhibited multiple illnesses indicated a poor immune system and general susceptibility to many infections; it was not determined whether this was due to genetics, or social or environmental factors (Khudaverdyan et al. 2019; Magilton 2008; Santacroce et al. 2021). At the medieval Danish leprosarium of Tirup, nearly 50% of the individuals present exhibited LEH (Bolden 2005). Similarly, the medieval cemetery of Chichester, UK, known for an outbreak of leprosy, demonstrated LEH on over 55% of the population. However, at the leprosarium of Box Lane, UK, only 25% of the skeletons examined presented LEH (Papadopoulou & Buckberry 2019). Considering the relationship between LEH and leprosy appears to be dependent on other factors and not solely disease etiology, and a positive correlation is not consistently seen at sites, along with the limited direct studies on this interdependence, LEH was not used as a means of identifying leprosy within this study (Boldsen 2005, 2009; Khudaverdyan et al. 2019; Papadopoulou & Buckberry 2019).

There were four adults at Ismenion Hill whose dentition alone suggests they suffered from leprosy. Cranium 1, Grave 26, exhibited periodontal disease across the maxillae and mandible, where RM^1 and RM^2 were lost prior to death with a large abscess at the tooth cavity base, and the RPM^1 and LM^1 bear large caries. RM_1 had a large carie on the CEJ of the buccal side, with the right mandible having heavier wear than the left indicating the right was used more frequently for mastication, perhaps due to facial nerve damage (Figure 37). The skeletal remains for Cranium 1 showed evidence for leprous infection (Liston 2017), thus, paired with the dental analysis, it is suggested that this individual most likely had leprosy. Further, an individual from Grave 25 exhibited periodontal disease spreading across the remaining mandible with clear evidence of bone remodelling concentrated below the left incisors and canines. The RI_1, RM_1 and RM_3 were lost antemortem, with LM_2 and LM_3 at the CEJ having caries on the buccal side (Figure 38). The anterior teeth were more heavily worn than the distal, suggesting the molars were not used, most likely due to tooth loss and carious infections. The RPM_1 had the bulbous dental calculus, typically seen with leprosy. As the skeletal remains of this individual were noted as reflecting leprosy (Liston 2017), it seems likely that they suffered from the disease. Moreover, the "Youngest Adult" from Grave 19, exhibited periodontal disease across their mandible and maxilla, RM_1 and LM_1 had caries on the occlusal and distal surfaces, and abscesses at the root apexes. The mandibular and maxillary left canines, premolars, and molars had the bulbous dental calculus indicating the left side was minimally used possibly due to nerve damage (Figure 39). Likewise, the skeletal remains reflected a leprosy infection (Liston 2017), overall suggesting this individual likely experienced the disease. Finally, an individual from Grave 12 exhibited periodontal disease across their mandible and maxilla, with heavy resorption focused on the anterior teeth. The LPM_2, LM^1 and LM^2 were lost antemortem, and the RM_1 had a large abscess at the root apex. There was slightly heavier wear on the anterior teeth suggesting they were used more frequently, and there was bulbous calculus present on the mandibular premolars and molars (Figure 40). While the skeletal analysis did not note this individual for leprosy (Liston 2017), their dentition is suggestive that they suffered from it.

Figure 37. Cranium 1, Grave 26, right side of mandible with large caries and wear.

Figure 38. Individual from Grave 25, left side of mandible with large caries.

Figure 39. "Youngest Adult", Grave 19, left side of mandible with large caries and calculus.

Figure 40. Individual of Grave 12, right side of mandible with large abscess and calculus.

There were an additional three individuals from Ismenion Hill who exhibited some of the characteristics of leprosy, however, not strongly enough to confidently suggest that they actually had the disease. Skeleton 4, from Grave 19, exhibited periodontal disease throughout their maxillae, with AMTL of RPM^2, RM^1 and LPM^2. It cannot be suggested that this individual had leprosy as there was no dental calculus or wear indicative of infection. However, the skeletal remains indicated they suffered from the disease (Liston 2017). This discrepancy could be because the infection was not severe enough to impact the dentition. Further, an individual from the Parking Lot Grave exhibited periodontal disease, with RPM^1 and LM^1 lost antemortem and an abscess at the root of RC^1. There were, however, few caries and little calculus, preventing a confident diagnosis of leprosy. Finally, Skeleton 2C ("Largest Male"), Grave 20, exhibited periodontal disease, with RM_1 lost antemortem and small caries present on RM_1 and RM_2. While there was dental calculus present, it is minimal, only on the anterior teeth, and did not match the appearance typically seen with leprosy, suggesting they did not have the disease.

Thus, only four individuals at Ismenion Hill were suggested as having signs of leprosy based on the dental analysis. However, this number may not be an accurate reflection of the population as many of the traits indicative of leprosy can only be assessed on *in situ* dentition with surviving mandibles or maxillae, and the bulk of the Ismenion Hill collection did not have associated mandibles or maxillae. As well, the diagnostic characteristics that can be seen on loose teeth can be lost in the archaeological record or during storage. Caries weaken the tooth structure often leading to fractures or breakages, and calculus can be chipped away or altogether broken off during excavation, analysis and storage (Holland et al. 1997; Manifold 2012, 2013). Furthermore, as discussed, many of the features of leprosy are co-occurring, and so the presence of one trait resulting from something that is not leprosy, can create the characteristics indicative of leprosy causing misdiagnoses (Boldsen 2009; Guo et al. 2017; Ogden & Lee 2008; Roberts & Manchester 2005; Trautman 1984). Finally, it must be stressed that leprosy cannot be assessed solely from the dentition. An accurate representation of the disease must consider the bone analysis, dental analysis, funerary and burial contexts, archaeological record and historical documents. This study does not have the space for such an examination, and therefore cannot confidently state whether leprosy was present or not, but can simply suggest four individuals exhibited features indicative of the disease. Ultimately, it cannot be determined from this research if Ismenion Hill was an early hospital, as the rate of leprosy is limited. As well, the prevalence of caries and LEH fall within expected ranges of Byzantine Greek sites, suggesting that there were no major health concerns at this time or specific to this population.

4.8. Limitations

One of the biggest limitations of this study was the data collection period. This project was originally not meant as a MA dissertation, but as a quick analysis of the dental collection of Ismenion Hill. The physical examination of the teeth was conducted in less than four days; the collection process was fast which could have created errors despite best efforts. This shortened period did not allow for dental measurements to be taken, and so any methods using dental metrics could not be employed. Additionally, age-at-death and wear assessments could not be conducted on site, with the teeth in hand, but rather had to be done later using only pictures of the teeth. Inevitably, determining age and wear from pictures is not ideal and can cause inaccurate assessments. Further, because of the nature of the teeth, with the majority being loose, features of dental analyses including AMTL, periodontal disease and abscesses, were not able to be assessed and therefore cannot be used as a means of understanding population health and demography. Nevertheless, this study was conducted at the highest quality possible given the circumstances.

CHAPTER 5: CONCLUSION

This study achieved its goal of understanding demography, diet and health at the site of Ismenion Hill based on the dental remains. Analysis of the site demography included determining the minimum likely number of individuals present and age-at-death. Through pair matching methodology, it was seen that there were at least 210 individuals buried at Ismenion Hill. Undeveloped and developed teeth were assessed for age-at-death, indicating the site contained more Non-adults (N=126; 60%) than adults (N=84; 40%). Non-adults died most commonly in infancy (N=94; 74.6%) based on tooth development, while adults died more commonly as young adults based on dental wear. Consequently, the demography of Ismenion Hill consisted mainly of non-adults and young adults. Moreover, the prevalence of dental calculus at the site was relatively low (N=128 teeth; 6.8%) compared to other contemporary collections, suggesting a higher reliance of plant material than animal protein. Dental caries were found on 5.7% of the teeth, roughly matching other Byzantine sites in Greece. The prevalence rate of caries falls within the expected ranges of both hunter-gatherer and agricultural practices, suggesting the population at Ismenion Hill had a mixed subsistence system. Thus, it is proposed that the diet of the site consisted mainly of harvested and gathered plants, with little domesticated meat. Furthermore, it was observed that 85 individuals (40.5%) had LEH, which most commonly developed between the ages 2.0 and 4.99 years (N=395 LEH bands; 77.8%), indicating a high stress period in childhood. When added to the high infant mortality rate, it becomes apparent that the ages between two and six years could be stressful. This period aligns with weaning children from breastmilk, which could lead to malnutrition, illness and even death. Therefore, it can be suggested that heathy children who survived the hardship of weaning could develop LEH markers, while more frail infants died. Additionally, it was determined that four individuals at Ismenion Hill potentially suffered from leprosy. Considering its low prevalence from the dental evidence (1.9%) as well as the low rate of calculus and dental pathologies, it cannot be suggested that site was the location of an early form of a hospital based on the dentition. Collectively, this study provided new and valuable information on the demography, diet and health of the population at Ismenion Hill.

Further research of Ismenion Hill should consider the bone and dental analysis together, alongside the burial, funerary and archaeological contexts to fully understand the nature of the site. Within the greater field of bioarchaeology, researchers should consider dentition a primary source of evidence that requires appropriate attention equal to bone analysis. Dental analyses are beneficial and can generate significant insight into a past population while preserving and caring for the finite bioarchaeological record.

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APPENDICES

APPENDIX A
Scholarship Bioarchaeology

A.1. Bioarchaeological Scholarship in Greece

In Greece, bioarchaeological studies emerged in the 1910s when Clon Stefanos, regarded in Greece as the 'Father of Bioarchaeology', developed the first human skeletal collection in the Department of Pathology and Anatomy, at the University of Athens (Barmpouti 2015; Lagia et al. 2014). In 1924, Stefanos' successor, John Koumaris, became the first professor in Anthropology to specialize in, and teach, human skeletal biology at the university. He advocated for interdisciplinary studies and the equal analysis of culture and biology (Koumaris 1939, 1961). Around this time, American anthropologist John Lawrence Angel (1943, 1944) arrived in Greece freshly trained under Earnst Hooton in classics and physical anthropology. Angel amalgamated environmental, archaeological and anthropological studies to examine ancient cemeteries. His holistic approach endorsed the study of large skeletal collections that were previously ignored due to their enormity. Further, Greek scholar, Aris Poulianos, established the Anthropological Association of Greece in 1971, which trained bioarchaeologists in holistic methodologies (e.g. Pitsios 1977; Xirotiris 1986). The introduction and dissemination of New Archaeology in Greece championed for interdisciplinary studies and a dependency on science and the scientific method with strong foundations in explicit methodologies and underlying theoretical understandings (Dyson 1993; Snodgrass 1985; Watson et al. 1991). The spread of New Archaeology brought visiting scholars to Greece and developed new advancements from neighboring scientific and cultural disciplines into bioarchaeology (Lagia et al. 2014). This firmly established Greece within the global study of human archaeological remains (Eliopoulos et al. 2011).

A.2. Byzantine Greece Scholarship

Bioarchaeological research of the Byzantine period in Greece is rather limited. The bulk of studies have focused on dietary reconstruction and the analysis of funerary practices. Angel's (1971) study of Byzantine Greek skeletons explored food discrepancies between aristocrats and commoners. He used skeletal growth and stress marks, stature, and overall health to compare the richness of the food consumed by high and low status citizens. With the advancement of technology, Gravie-Lok (2001) employed stable isotope analysis to examine bone collagen and carbonate of human and faunal remains from coastal, mainland and island archaeological sites dating throughout the Byzantine period. Her analysis demonstrated that majority of the populations studied relied on animal milk and protein, and discovered the presence of millet which was previously unseen in Greek populations. Bourbou and Richards (2004) built on Gravie-Lok's work, incorporating Byzantine sites with various proximities to salt-water resources. Their study confirmed Gravie-Lok's conclusions and demonstrated that the Byzantine diet was relatively similar across Greek communities, regardless of salt-water location. As well, Bourbou and Richards revealed a high reliance on dairy products among lower social classes. In 2010, Bourbou conducted a bioarchaeological analysis of Byzantine Crete which explored diet alongside health and disease. She analyzed eight skeletal collections, examining markers of malnutrition, indications of growth disruptions, and developmental disorders to understand the affect diet had on childhood survivorship. Further isotopic studies by Bourbou and colleagues (2011) identified an increased reliance on deep sea fishing during the spread and introduction of Christianity as a dietary food supplement during fasting periods. As well, Papagerogopoulou and Xirotiris (2009) conducted a skeletal analysis of the Byzantine site of Korytiani, West Greece to explore the prevalence of disease on both the bones and the dentition as an indication of dietary practices, while Michael and colleagues (2017) studied stress and activity markers in multiple skeletal collections across Byzantine Thebes to examine dietary differences between males and females. Moreover, the study of Byzantine Greek funerary practices using skeletal remains was initiated by Tritsaroli, at the University of Groninen, in the late 2010s and early 2020s. Throughout her work, Tritsaroli (2017, 2022; Tritsaroli et al. 2022) has examined multiple archaeological sites and systematically observed skeletal treatment and body placement in burials, while analyzing the human remains for indications of health, diet and disease. Joining funerary archaeology and bioarchaeology, Tritsaroli has linked unique burial and funerary customs with specific social classes, and has outlined key characteristics of Byzantine era cemeteries.

APPENDIX B
Grave 38 Example of Calculating MLNI

Context/Identity Information	Permanent (P) vs. Deciduous (D)	Tooth Type	Upper/Maxillary (U) vs. Lower/Mandibular (L)	Left (L) vs. Right (R)	Notes
Bag: "Skeleton 1" Loose teeth	P	PM1	L	R	
Bag: "Skeleton 1" Loose teeth	P	M3	U		
Bag: "Skeleton 1" Loose teeth	P	M3	U		
Bag: "Skeleton 1" Loose teeth	P	M1	L	L	
Bag: "Skeleton 1" Loose teeth	P	I1	U	L	
Bag: "Skeleton 1" Loose teeth	P	I1	U	R	Match
Bag: "Skeleton 1" Loose teeth	P	I1	U	L	Match
Bag: "Skeleton 1" Loose teeth	P	I1	U	L	
Bag: "Skeleton 1" Loose teeth	P	I1	U	R	
Bag: "Skeleton 1" Loose teeth	P	C	U	R	
Bag: "Skeleton 1" Loose teeth	P	I1	U	L	
Bag: "Skeleton 1" Loose teeth	P	C	U	R	
Bag: "Skeleton 1" Loose teeth	P	C	L	L	
Bag: "Skeleton 1" Loose teeth	P	C	L	R	
Bag: "Skeleton 1" Loose teeth	P	C	L	L	
Bag: "Skeleton 1" Loose teeth	P	C			
Bag: "Skeleton 1" Loose teeth	P	C	U	L	
Bag: "Skeleton 1" Loose teeth	P	I2	U	R	Repeat
Bag: "Skeleton 1" Loose teeth	P	PM2	U		

Context/Identity Information	Permanent (P) vs. Deciduous (D)	Tooth Type	Upper/Maxillary (U) vs. Lower/Mandibular (L)	Left (L) vs. Right (R)	Notes
Bag: "Skeleton 1" Loose teeth	P	I1	U	L?	
Bag: "Skeleton 1" Loose teeth	P	I2	U	R	Repeat
Bag: "Skeleton 1" Loose teeth	P	I2	U	L	
Bag: "Skeleton 1" Loose teeth	P	PM1	U	R	
Bag: "Skeleton 1" Loose teeth	P	PM2	U		
Bag: "Skeleton 1" Loose teeth	P	PM2	L		
Bag: "Skeleton 1" Loose teeth	P	PM2	L	R	
Bag: "Skeleton 1" Loose teeth	P	PM1	L	L	Match
Bag: "Skeleton 1" Loose teeth	P	PM1	L	R	Match
Bag: "Skeleton 1" Loose teeth	P	PM2	L		
Bag: "Skeleton 1" Loose teeth	P	PM	U		
Bag: "Skeleton 1" Loose teeth	P	I1	U	L	
Bag: "Skeleton 1" Loose teeth	P	PM2	U	R	
Bag: "Skeleton 1" Loose teeth	P	PM2	L	R	
Bag: "Skeleton 1" Loose teeth	P	PM	L		
Bag: "Skeleton 1" Loose teeth	P	PM	L		
Bag: "Skeleton 1" Loose teeth	P	C	L	R	
Bag: "Skeleton 1" Loose teeth	P	M3	U		
Bag: "Skeleton 1" Loose teeth	P	M1/M2	L		
Bag: "Skeleton 1" Loose teeth	P	M1	U	R	

Context/Identity Information	Permanent (P) vs. Deciduous (D)	Tooth Type	Upper/Maxillary (U) vs. Lower/Mandibular (L)	Left (L) vs. Right (R)	Notes
Bag: "Skeleton 1" Loose teeth	P	M3	U		
Bag: "Skeleton 1" Loose teeth	P	M1	U	R	
Bag: "Skeleton 1" Loose teeth	P	M2	U	R	
Bag: "Skeleton 1" Loose teeth	P	M3	U		
Bag: "Skeleton 1" Loose teeth	P	M3	U		
Bag: "Skeleton 1" Loose teeth	P	M3			
Bag: "Skeleton 1" Loose teeth	P	M			
Bag: "Skeleton 1" Loose teeth	P	M3			
Bag: "Skeleton 1" Loose teeth	P	M3			
Bag: "Skeleton 1" Loose teeth	D	M2	L	R	
Bag: "Skeleton 1" Loose teeth	P	M2	L	R	Match
Bag: "Skeleton 1" Loose teeth	P	M3	L	R	Match
Bag: "Skeleton 1" Loose teeth	P	M3	L		
Bag: "Skeleton 1" Loose teeth	P	M1	L	L	
Bag: "Skeleton 1" Loose teeth	P	M1	L	R	
Bag: "Skeleton 1" Loose teeth	P	M1	L	L	
Bag: "Skeleton 1" Loose teeth	P	PM	L	R	
Bag: "Skeleton 1" Loose teeth	P	M	L		
Bag: "Skeleton 1" Loose teeth	P	M2	L	L	
Bag: "Skeleton 1" Loose teeth	P	M	L		

Context/Identity Information	Permanent (P) vs. Deciduous (D)	Tooth Type	Upper/Maxillary (U) vs. Lower/Mandibular (L)	Left (L) vs. Right (R)	Notes
Bag: "Skeleton 1" Loose teeth	P	M	L		
Bag: "Skeleton 1" Loose teeth	P	M2	L	R	
Bag: "Skeleton 1" Loose teeth	P	M	L		
Bag: "Skeleton 1" Loose teeth	P	M	L		
Bag: "Skeleton 1" Loose teeth	P	I2	U	R	Repeat
Bag: "Skeleton 1" Loose teeth	P	I2	L	R	
Bag: "Skeleton 1" Loose teeth	P	I2	U	R	Repeat
Bag: "Skeleton 1" Loose teeth	P	I2	U	L	
Bag: "Skeleton 1" Loose teeth	P	I2	U	L	
Bag: "Skeleton 1" Loose teeth	D	I1	L	L	
Bag: "Skeleton 1" Loose teeth	P	I1	L	L	
Bag: "Skeleton 1" Loose teeth	P	I1	L	L	
Bag: "Skeleton 1" Loose teeth	P	I1	L	L	
Bag: "Skeleton 1" Loose teeth	P	I1	L	R	
Bag: "Skeleton 1" Loose teeth	P	I1	L	L	
Bag: "Skeleton 1" Loose teeth	P	I2			
Bag: "Skeleton 1" Loose teeth	P	I2	L	R	
Bag: "Skeleton 1" Loose teeth	P	I			
Bag: "Skeleton 1" Loose teeth	P	C	U	L	*In situ*
Bag: "Skeleton 1" Loose teeth	P	PM1	U	L	*In situ*

Context/Identity Information	Permanent (P) vs. Deciduous (D)	Tooth Type	Upper/Maxillary (U) vs. Lower/Mandibular (L)	Left (L) vs. Right (R)	Notes
Bag: "Skeleton 1" Loose teeth	P	C	U	R	
Bag: "Skeleton 1" Loose teeth	P	I2	L	R	
Bag: "Skeleton 1" Loose teeth	P	PM2	U		
Bag: "Skeleton 1" Loose teeth	P	PM1	U		
Bag: "Skeleton 1" Loose teeth	P	M2	L	R	
Bag: "Skeleton 1" Loose teeth	P	M2	L		
Bag: "Skeleton 1" Loose teeth	P	PM			
Bag: "Skeleton 1" Loose teeth	P	PM	L		
Bag: "Skeleton 1" Loose teeth	P	M2	U		
Bag: "Skeleton 1" Loose teeth	P	PM2	L		
Bag: "Skeleton 1" Loose teeth	P	M	L		
Bag: "Skeleton 1" Loose teeth	P	PM	L		
Skeleton A	P	M3	L	R	*in situ*
Skeleton A	P	M2	L	R	*in situ*
Skeleton A	P	M1	L	R	*in situ*
Skeleton A	P	PM2	L	R	*in situ*
Skeleton A	P	PM1	L	R	*in situ*
Skeleton A	P	C	L	R	*in situ*
Skeleton E	P	M1	U	L	*in situ*
Skeleton E	P	M2	U	L	*in situ*
Skeleton E	P	M3	U	L	*in situ*
Skeleton F	P	PM2	U	R	*in situ*
Skeleton F	P	PM1	U	R	*in situ*
Skeleton F	P	I2	U	R	*in situ*
Skeleton F	P	I1	U	R	*in situ*
Skeleton F	P	I1	U	L	*in situ*
Skeleton F	P	C	U	L	*in situ*

Context/Identity Information	Permanent (P) vs. Deciduous (D)	Tooth Type	Upper/Maxillary (U) vs. Lower/Mandibular (L)	Left (L) vs. Right (R)	Notes
Skeleton F	P	PM2	U	L	*in situ*
Skeleton F	P	M1	U	L	*in situ*
Skeleton F	P	M2	U	L	*in situ*
Skeleton D	P	PM2	L	R	*in situ*
Skeleton D	P	PM1	L	R	*in situ*
Skeleton D	P	C	L	R	*in situ*
Skeleton D	P	I2	L	R	*in situ*
Skeleton D	P	I1	L	R	*in situ*
Skeleton D	P	I1	L	L	*in situ*
Skeleton D	P	I2	L	L	*in situ*
Skeleton D	P	C	L	L	*in situ*
Skeleton D	P	PM1	L	L	*in situ*
Skeleton D	P	PM2	L	L	*in situ*
Skeleton D	P	M1	L	L	*in situ*
Skeleton D	P	M2	L	L	*in situ*
Skeleton D	P	M3	L	L	*in situ*
Skeleton 1	P	M3	L	R	*in situ*
Skeleton 1	P	M2	L	R	*in situ*
Skeleton 1	P	C	L	R	*in situ*
Skeleton 1	P	PM1	L	L	*in situ*
Skeleton 1	P	PM2	L	L	*in situ*
Skeleton 1	P	M1	L	L	*in situ*
Skeleton 1	P	M2	L	L	*in situ*
Skeleton 1	P	M3	L	L	*in situ*
Skeleton B	P	M1	L	R	*in situ*
Skeleton B	P	PM2	L	R	*in situ*
Skeleton B	P	PM1	L	R	*in situ*
Skeleton B	P	C	L	R	*in situ*
Skeleton B	P	I2	L	R	*in situ*
Skeleton H	P	M1	U	R	*in situ*
Skeleton H	P	PM2	U	R	*in situ*
Skeleton H	P	PM1	U	R	*in situ*
Skeleton C	P	I1	L	L	*in situ*
Skeleton C	P	I2	L	L	*in situ*
Skeleton C	P	C	L	L	*in situ*

Context/Identity Information	Permanent (P) vs. Deciduous (D)	Tooth Type	Upper/Maxillary (U) vs. Lower/Mandibular (L)	Left (L) vs. Right (R)	Notes
Skeleton C	P	PM1	L	L	*in situ*
Skeleton C	P	PM2	L	L	*in situ*
Skeleton C	P	M1	L	L	*in situ*
Skeleton C	P	M2	L	L	*in situ*
Skeleton G	P	M3	U	R	*in situ*
Skeleton G	P	M2	U	R	*in situ*
Skeleton G	P	M1	U	R	*in situ*
Skeleton G	P	PM2	U	R	*in situ*
Skeleton G	P	PM1	U	R	*in situ*
Skeleton G	P	C	U	R	*in situ*

Table 1. Inventory of Grave 38 as an example of how MLNI was determined. Bolded areas are individuals determined from pair matching or they have *in situ* teeth associated with specific individuals. Under notes, "repeat" identifies teeth that are used to calculate MLNI as they are the highest repeated tooth type within that grave, "match" identifies teeth that are paired together, "*in situ*" identifies teeth that remained *in situ* in maxillae or mandibles.

APPENDIX C
Dental Inventory

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
4	1-3-61	P	U	RT	I2					4			1	
4	1-3-61	P	U	RT	PM1					4				
4	1-3-61	P	U	RT	PM2					4				
4	1-3-61	P	U	RT	M1						16			
4	1-3-61	P	U	RT	M2						16			
4	1-3-61	P	U	RT	M3						16			
4	1-3-61	P	U	RT	C					4			1	
4	1-3-61	P	U	LT	PM1					4				
4	1-3-61	P	U	LT	M1	X					16			
4	1-3-61	P	U	LT	M2						16			
4	1-3-61	P	U	LT	M3						16			
4	1-3-61	P	U	LT	I1					7			1	
4	1-3-61	P	U	RT	I1					7				
4	1-3-61	P	U	RT	I2					7				
4	1-3-61	P	U	RT	C					7				
4	1-3-61	P	U	LT	I1					2			1	
4	1-3-61	P	U	RT	I1					2				
4	1-3-61	P	U	LT	I2					1			1	
4	1-3-61	P	U	RT	I2					1				
4	1-3-61	P	L	RT	PM2					5			3	
4	1-3-61	P	U	LT	C				1	7				
4	1-3-61	P	U	LT	I2					2				
4	1-3-61	P	L	LT	I2		X		3.31	3				
4	1-3-61	P	U	RT	C				3.35	6				
4	1-3-61	P	U	LT	C					4				
4	1-3-61	P	L	LT	C					3				
4	1-3-61	P	L	RT	C					4				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
4	1-3-61	P	U	RT	PM1					1				
4	1-3-61	P	U	RT	PM2					1				
4	1-3-61	P	U	RT	PM1				2.10, 4.03	1				
4	1-3-61	P	U	RT	PM1					1				
4	1-3-61	P	U	LT	PM1				2.5	1				
4	1-3-61	P	U	RT	PM1					5				
4	1-3-61	P	U		PM2					6				
4	1-3-61	P	L		PM					7				
4	1-3-61	P	L	RT	PM1					6				
4	1-3-61	P	U		PM2				2.7	6				
4	1-3-61	P	L	LT	PM1				1.95	5				
4	1-3-61	P	L		PM					6				
4	1-3-61	P	U	LT	M1	X					8			
4	1-3-61	P	U		M3						28			
4	1-3-61	P	U	LT	M3	X					8			Repeat
4	1-3-61	P	U	LT	M3		X				12			Repeat
4	1-3-61	P	U	LT	M2						4			
4	1-3-61	P	U		M	X					32			
4	1-3-61	P	L	RT	M2						20			
4	1-3-61	P	L		M2						20			
4	1-3-61	D	L	RT	M1							8		
4	1-3-61	D	U	LT	M2						8			
4	1-3-61	P	L	RT	C							4.5		
4	1-3-61	P	U	LT	M3							13.5		Repeat
5	1-3-64	P	U	RT	I1				3.06	4				SRA
5	1-3-64	P	L		PM					4			1	SRA
5	1-3-64	P			PM	X				3				SRA

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
5	1-3-64	P	L	LT	I1								1	
5	1-3-64	P	L	LT	I2									
5	1-3-64	P	L	LT	C				2.97, 4.51					
5	1-3-64	P	L	LT	PM2					3			1	
5	1-3-64	P	L	LT	M1						16			
5	1-3-64	P	L	LT	M2						4		1	
5	1-3-64	P	L	RT	M2						4			
5	1-3-64	P	U	LT	I2								1	
5	1-3-64	P	U	RT	I2				2.54, 3.83	1				
5		P	U	RT	M2							9.5	1	
5		P	U	LT	M2							9.5		
5		D	L	LT	M2							11.5	1	
5		D	L	RT	M2							11.5		
5	1-3-55/64	D			C							38 weeks *in utero*	1	
5	1-3-55/64	D	U		M2							38 weeks *in utero*		
5	1-3-55/64	D			M							38 weeks *in utero*		
5		P	U	LT	I1			Carabelli's Cusp				4.5	1	
5		P	U	RT	I1			Carabelli's Cusp				4.5		
5		D	U	RT	M2									
5		D	U	LT	M2								1	
5		D	U	RT	M2									

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
5		P	L	RT	I1							4.5	1	
5		P	L	LT	I1							4.5		
5		P	U	RT	PM1							5.5	1	
5		P	U	RT	PM2							5.5		
5	1-3-64	P	L	LT	M1					5			5	
5	1-3-64	P	L	LT	M2					2				
5	1-3-64	P	L	RT	M2					1				
5	1-3-64	P	L	RT	M2					3				
5	1-3-64	P	L	LT	M1									
5	1-3-64	P	L	LT	M1									
5	1-3-64	P	L	RT	M1									
5	1-3-64	P	L	LT	M2									
5	1-3-64	P	L		M									
5	1-3-64	P	L	RT	M3									
5	1-3-64	P	L		M									
5	1-3-64	P	L	LT	M2									
5	1-3-64	P	L	RT	C									
5	1-3-64	P	L	RT	I2									
5	1-3-64	P	L	RT	I1									
5	1-3-64	P	U	LT	C									
5	1-3-64	P	L	LT	PM2									
5	1-3-64	P	U	LT	I2									
5	1-3-64	P	U		C									
5	1-3-64	P	L	LT	PM2						16			
5	1-3-64	P	L	LT	PM2						8			
5	1-3-64	P	L		PM						8			
5	1-3-64	P	L		PM1						16			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
5	1-3-64	P	L	LT	PM2						8			
5	1-3-64	P	L	LT	PM2						8			
5	1-3-64	P	L	LT	PM1						20			
5	1-3-64	P	U		PM2						12			
5	1-3-64	P	L	LT	PM				4.33, 6.57	4				
5	1-3-64	P	U	RT	I2				4.07	3				Repeat
5	1-3-64	P	L	RT	I2?					3				
5	1-3-64	D	U		M2					5				
5	1-3-64	P	U	RT	PM1					4				
5	1-3-64	P	U	LT	M1					1				
5	1-3-64	P	U	RT	I1					6				
5	1-3-64	P	U	RT	M2					3				
5	1-3-64	P	U	RT	I2					4				Repeat
5	1-3-64	P	U	RT	M2					5				
5	1-3-64	P	U	LT	I1					4				
5	1-3-64	P	U	LT	M2				2.92					
5	1-3-64	P	U		M	C						7.5		
5	1-3-64	P	U	RT	M2					3				
5	1-3-64	P	U	LT	M3					5				
5	1-3-64	P	U	LT	M3					1				
5	1-3-64	P	U	LT	I1				3.64	3				
5	1-3-64	P	U		I1				5.09	3				
5	1-3-64	P	U	LT	PM1			Carabelli's Cusp				4.5m		
5	1-3-64	P	U	RT	M3					4				
5	1-3-64	P	U	RT	PM1						4			
5	1-3-64	P	U	LT	PM1					1				
5	1-3-64	P	U	RT	PM1						16			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
5	1-3-64	P	U		M				2.40, 4.50, 6.37	4				
5	1-3-64	P	U	LT	M3						20			
5	1-3-64	P	U	LT	M3							9.5		
5	1-3-64	P	U	LT	PM2						8			
5	1-3-64	P	U	LT	I						24			
5	1-3-64	P			PM						16			
5	1-3-64	P	U		PM1						16			
5	1-3-64	P	U		PM1						4			
5	1-3-64	P	U	LT	I1					3				
5	1-3-64	P	U	LT	PM1					2				
5	1-3-64	P	U	RT	I2					3				Repeat
5	1-3-64	P	U	LT	C					4				
5	1-3-64	P	U		PM2					5				
5	1-3-64	P	U		PM2					5				
5	1-3-64	P	U		I1					5				
5	1-3-64	P	U		C					5				
5	1-3-64	P	U	RT	C					1				
5	1-3-64	P	L		M					1				
5	1-3-64	P	U		I1					4				
5		P	U	LT	I1							5.5		
5		P	U	LT	I2							5.5		
5		P	U	RT	M1							4.5		
5		P	U	LT	M2			Carabelli's Cusp				8.5		
5		P	U	RT	M2							9.5		
5		D	L	RT	M2							9.5		
5		P	L	LT	M1							5.5		

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
5		D	U	LT	M2							8.5		
5		D	U	LT	M2						4			
5		D	U	RT	M1							8.5		
5		D	L	RT	M1							7.5m		
5		D	L	RT	M1							7.5m		
5		D	L	LT	M1							10.5m		
5		P	U	RT	C					3				
5		P	U	LT	PM1							6.5		
5		P	L	LT	M2						8			
5		P	L		M2						8			
5		P	L		PM							6.5		
5		P	L		PM1							5.5		
5		P			M3							13.5		
5		P			M3							13.5		
5		P	L		M3						32			
5		P	L		M3							13.5		
5		P	L	LT	M2							8.5		
5		P	L	RT	M2							7.5		
5		P	L		M3									
5		P	L		M3							13.5		
5	1-3-55/64	D	U	LT	C						20			
5	1-3-55/64	D	L	LT	M1							1.5m		
5		P	U	LT	I2							5.5		
5		P	U	RT	I2							5.5		Repeat
5		P	L	RT	C							5.5		
5		P	U	RT	I2							5.5		Repeat
5		P	L	LT	C							5.5		

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
5		P	L	LT	I2							3.5		
5		D	U	LT	C					4				
5		D	U	RT	C					6				
9	2-3-29	P	U	LT	I1							4.5	1	
9	2-3-29	P	U	RT	I1							4.5		
9	2-3-29	P	U	LT	C							4.5		
9	2-3-29	P	U	LT	M1			Carabelli's Cusp				3.5	1	
9	2-3-29	P	U	RT	M1			Carabelli's Cusp				3.5		
9	2-3-29	P	L	RT	PM2							6.5	1	
9	2-3-29	P	U	RT	PM1							6.5		
9	2-3-29	P	L	RT	I1				2.24. 3.13			4.5	1	
9	2-3-29	P	L	RT	I2				1.81, 3.71			4.5		
9	2-3-29	P	L	LT	I1				3.76			3.5	1	
9	2-3-29	P	L	RT	I2							3.5		
9	2-3-29	P	L	RT	C				2.83, 4.50, 7.46	2			1	
9	2-3-29	P	L	LT	C				3.27, 5.16	2				
9	2-3-29	P	U	RT	C				5.1	1			1	
9	2-3-29	P	U	LT	C					1				
9	2-3-29	P	U	LT	PM2					2			1	
9	2-3-29	P	U	RT	PM2					2				
9	2-3-29	P	U	LT	M1			Carabelli's Cusp			4		1	
9	2-3-29	P	U	RT	M1			Carabelli's Cusp			4			
9	2-03-29	P	U	RT	I1					5			1	

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
9	2-03-29	P	U	LT	I1					5				
9	2-3-29	D	U	RT	M2							1.5		
9	2-3-29	D	U	LT	M2							1.5		
9	2-3-29	P	L	RT	C							2.5-3.5		
9	2-3-29	P	U	RT	I2							5.5	9	
9	2-3-29	D	L	LT	M1							7.5m		
9	2-3-29	D	L	RT	M1							10.5m		
9	2-3-29	D	L	LT	M1							7.5m		
9	2-3-29	D	L	LT	M2							10.5m		
9	2-3-29	D	L	RT	M2							1.5		
9	2-3-29	D	L	RT	M2							1.5		
9	2-3-29	D	L	LT	M2							1.5		
9	2-3-29	P	L	LT	M3							12.5		
9	2-3-29	D?	U?		M							4.5m		
9	2-3-29	D	L	RT	C							10.5m		
9	2-3-29	P	U	LT	I1							4.5		
9	2-3-29	P	U	RT	I1							4.5		
9	2-3-29	P	L	LT	M1							2.5		Repeat
9	2-3-29	P	L	RT	M1							3.5		
9	2-3-29	P	L	RT	M1							3.5		
9	2-3-29	D	L	LT	M2							1.5		
9	2-3-29	P	L	LT	M1							2.5		Repeat
9	2-3-29	P	L	LT	M3?							14.5		
9	2-3-29	P	U	LT	M1			Carabelli's Cusp				2.5		
9	2-3-29	P	U	LT	M3							12.5		
9	2-3-29	P	U		M3			Carabelli's Cusp				14.5		
9	2-3-29	D	U	RT	M2			Carabelli's Cusp				11.5		
9	2-3-29	P	U	RT	M			Carabelli's Cusp				2.5		

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
9	2-3-29	P	L		PM2							6.5		
9	2-3-29	P	L	LT	PM1							6.5		
9	2-3-29	P	U	RT	PM2							6.5		
9	2-3-29	P	L	RT	PM2							6.5		
9	2-3-29	P	U	RT	PM1							6.5		
9	2-3-29	P	U	RT	I2			Shovelling				5.5		
9	2-3-29	P	L	LT	I1							3.5		
9	2-3-29	P	L	RT	I				2.08,4.15			4.5		
9	2-3-29	P	L		I				1.29			3.5		
9	2-3-29	P	L	RT	I2				4.22			3.5		
9	2-3-29	P	L	RT	I							3.5		
9	2-3-29	P	U	RT	I1							5.5		
9	2-3-29	P	U	RT	I1					4				
9	2-3-29	P	U	LT	I1					5				SRA
9	2-3-29	P	U	RT	I1					5				
9	2-3-29	P	U		I1					3				
9	2-3-29	P	L		I2							3.5		
9	2-3-29	P	L	LT	C									
9	2-3-29	P			C					3				
9	2-3-29	P	L		C				1.08, 2.27, 3.86, 6.43, 8.35	5				
9	2-3-29	P	U	RT	I1									
9	2-3-29	P	L	RT	C				1.63, 2.62	4				
9	2-3-29	P	L	RT	I2				3.57 ,5.49	4				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
9	2-3-29	P	L	LT	I1				3.09, 4.09, 5.30	4				
9	2-3-29	P	U	LT	I2					1				
9	2-3-29	P	L	LT	C				3.18, 4.17	1				
9	2-3-29	P	U	LT	C					3				
9	2-3-29	P	U	RT	C					1				
9	2-3-29	P	U	LT	C				4.86	1				
9	2-3-29	P	L	RT	C				2.19, 4.81, 6.51	4				
9	2-3-29	P	U	LT	C					3		6.5		
9	2-3-29	P	U	RT	C				1.97, 2.55, 4.18	3				
9	2-3-29	P	L	LT	C				3.13, 5.43	2				
9	2-3-29	P	L	RT	C				3.49	1				
9	2-3-29	P	L	LT	C				2.12, 3.32, 4.35	1				
9	2-3-29	P	U	LT	C				2.04	3				
9	2-3-29	P	U	RT	C					2				
9	2-3-29	P	U	LT	C		X			3				
9	2-3-29	P	U	LT	C				4.48	2		5.5		
9	2-3-29	P	U	LT	C				2.62, 5.29, 6.85			5.5		
9	2-3-29	P	U	RT	C				2.50, 5.44	2				
9	2-3-29	P	L	LT	PM2					6				
9	2-3-29	P	U	LT	PM2					4				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
9	2-3-29	P	L	LT	PM1				2.74, 4.98	1				
9	2-3-29	P	L	LT	PM2					2				
9	2-3-29	P	L	LT	PM2					5				
9	2-3-29	P	L		PM					3				
9	2-3-29	P	L	LT	PM2					2				
9	2-3-29	P	L		PM2					2				
9	2-3-29	P	L		PM2					1				
9	2-3-29	P	U		PM					1				
9	2-3-29	P	L		PM2					5				
9	2-3-29	P	U	RT	PM1					4				
9	2-3-29	P	U	RT	PM2					2				
9	2-3-29	P	U	LT	PM1					1				
9	2-3-29	P	U	RT	PM2					1				
9	2-3-29	P	U	LT	PM1					3				
9	2-3-29	P	U	RT	PM1					1				
9	2-3-29	P	U		M3				2.66		8			
9	2-3-29	P	L	RT	PM2					2				
9	2-3-29	P	U		PM	X				6				
9	2-3-29	P			PM					6				
9	2-3-29	P	L	LT	M2						20			
9	2-3-29	P	L	LT	M1							3.5		Repeat
9	2-3-29	P	L	LT	M1							2.5		Repeat
9	2-3-29	P	L	LT	M1							2.5		Repeat
9	2-3-29	P	L	RT	M1						24			
9	2-3-29	P	L	RT	M1						4			
9	2-3-29	P	L	LT	M1							3.5		Repeat
9	2-3-29	P	L	LT	M1						8			Repeat

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
9	2-3-29	D	L	RT	M1									
9	2-3-29	P	L	LT	M1						20			Repeat
9	2-3-29	P	L		M3						8			
9	2-3-29	P	L	LT	M3?						4			
9	2-3-29	P	L	RT	M1									
9	2-3-29	P	L	LT	M1						8			Repeat
9	2-3-29	P	U	RT	M2						4			
9	2-3-29	P	U		M3						16			
9	2-3-29	P	U	LT	M2						4			
9	2-3-29	P	L	RT	M1						4			
9	2-3-29	P	U	LT	M3						20			
9	2-3-29	P	L	LT	PM2						8			
9	2-3-29	P	U	LT	M3						4			
9	2-3-29	P	U	RT	M3						4			
9	2-3-29	P	U		M3						4			
9	2-3-29	P	U	RT	M3						4			
9	2-3-29	P	U		M3						4			
9	2-3-29	P	U		M3							11.5		
9	2-3-29	P	U	RT	M3						4			
9	2-3-29	P	U	RT	M1							3.5		
9	2-3-29	P	U	LT	M2							7.5		
9	2-3-29	P	U	LT	M1			Carabelli's Cusp			0			
9	2-3-29	P	U	LT	M1							3.5		
9	2-3-29	D	U	RT	M2			Carabelli's Cusp						
9	2-3-29	P	U	RT	M1			Carabelli's Cusp			20			
9	2-3-29	P			M						20			
9	2-3-29	P			M						20			
9	2-3-29	P			M									

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
9	2-3-29	P	L	LT	M2						0			
9	2-3-29	P	L	RT	M2						4			
9	2-3-29	P	L	RT	M2						4			
9	2-3-29	P	L	RT	M2						0			
9	2-3-29	P	L	LT	M2						16			
9	2-3-29	P	L	RT	M2						4			
9	2-3-29	P	L	LT	M2						0			
9	2-3-29	P	U	RT	M2						4			
9	2-3-29	P	U	LT	M2						0			
9	2-3-29	P	L	LT	M2						0			
9	2-3-29	P	L	RT	M2						4			
9	2-3-29	P	U	LT	M2						8			
9	2-3-29	P	U	RT	M2						12			
9	2-3-29	P	L	RT	M2						12			
9	2-3-29	P	U	LT	M3						8			
9	2-3-29	P	L	RT	PM2				1.96		4			
9	2-3-29	P	L	LT	PM1						8			
10	1-7-26	P	U	LT	PM1	X			2				1	
12	Skeleton 1-5-103	P	L	RT	I2		X			4			1	
12	Skeleton 1-5-103	P	L	RT	C				2.19, 3.61, 5.68	4				
12	Skeleton 1-5-103	P	L	RT	PM1				1.5	4				
12	Skeleton 1-5-103	P	L	RT	PM2					4				
12	1-05-9	P	U	RT	PM1					2			1	
12	1-05-9	P	U	LT	PM1					2				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
12	Skeleton 2	P	U	RT	M3	X					12		4	Repeat
12	Skeleton 1-5-103	P	U	LT	PM1					4				
12	Skeleton 1-5-103	P	U	LT	C				3.68	4				
12		P	U	LT	PM1					1				
12	1-05-9	P	U		PM					7				
12	1-05-9	P	U		PM2					4				
12	1-05-9	P	L	RT	C				2.95	3				
12	1-05-9	P	U	RT	PM1				1.51, 2.98, 4.33	2				
12	1-05-9	P	U	RT	PM2					2				
12	1-05-9	P	L	RT	I1					4				
12	1-05-9	P	L	RT	PM2				2.49	2				
12	1-05-9	P	L	RT	I1					3				
12	1-05-9	P	L	RT	I2					2				
12	1-05-9	P	L	RT	M1						8			
12	1-05-9	P	L		M3						8			
12	1-05-9	P	L	RT	M2						8			
12	1-05-9	P	L		M3						24			
12	1-05-9	P	U	RT	M3						8			Repeat
12	1-05-9	P	U	RT	M2						8			
12	1-05-9	P	U		M3						24			
12	1-05-9	P	U	LT	M1						12			
12	1-05-9	P	U	RT	M1						8			
12	1-05-9	P	U	LT	M1						24			
12	1-05-9	P	U	RT	M2						24			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
12	1-05-9	P	L	LT	I1					2				
12	1-05-9	P	L	LT	I2					3				
12	1-05-9	P	U	RT	I1				4.14, 6.39	2				Enamel Notch
12	1-05-9	P	L	RT	PM1					2				
12	1-05-9	P	L	RT	PM2					3				
12	1-05-9	P	L	RT	M2						12			
12	1-05-9	P	U	RT	PM					2				
12	1-05-9	P	U	RT	C				1.59, 3.59	3				
12	1-05-9	P	U	RT	C				2.89, 3.71, 5.08	3				
12	1-05-9	P	U	LT	C				2.39	2				
12	1-05-9	P	U	LT	M3						8			
12	1-05-9	P	U	RT	M3						8			Repeat
12	1-05-9	P	U	RT	M3						8			Repeat
12	1-05-9	P	L		M3						12			
12	1-05-9	P	U		M3						8			
12	3-5-0101	P	U	LT	I1							3.5		
12	3-5-0101	D	L	LT	M2									
12	3-5-0101	D	L	LT	M1							10.5		
12	3-5-0101	D	U	LT	I1									
12	3-5-0101	D	U	LT	I2							4.5		
12	3-5-0101	D	U	RT	C									
12	3-5-0101	D	L	LT	C									
18		P		RT	M3						12		1	
19		P	U	LT	I1					5			1	
19	1-7-44	D	U	LT	I2							4.5m		

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	With juvenile crania bag	D	L	LT	M1							2.5	1	
20	With juvenile crania bag	D	L	LT	M2							2.5		
20	With juvenile crania bag	D	L	LT	C							5.5-6.5	1	
20	With juvenile crania bag	D	L	LT	M1							5.5-6.5		
20	With juvenile crania bag	D	L	LT	M2							5.5-6.5		
20	With juvenile crania bag	P	L	RT	I1							5.5-6.5		
20	With juvenile crania bag	D	U	LT	I2							5.5	1	
20	With juvenile crania bag	D	U	RT	I2							5.5		

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	With juvenile crania bag	P	U	LT	I1				3.62, 6.34, 8.56			4.5	2	
20	With juvenile crania bag	P	L	RT	C				3.59, 6.74, 8.89			5.5		
20	With juvenile crania bag	P	U	RT	M1							3.5		
20	With juvenile crania bag	D	L	RT	M1							10.5		
20	With juvenile crania bag	D	U	RT	M1							10.5		
20	With juvenile crania bag	D	L		I1					1				
20	With juvenile crania bag	D	L	LT	I2							1.5		
20	With juvenile crania bag	D	U	RT	C							2.5		

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	With juvenile crania bag	D	L	LT	C							2.5		
20	With juvenile crania bag	D	L	RT	C									
20	With juvenile crania bag	D	U	RT	I1							5.5		
20	With juvenile crania bag	D	U	LT	I1									Repeat
20	With juvenile crania bag	D	U	LT	I1									Repeat
20	With juvenile crania bag	D	U	RT	I2									
20	With juvenile crania bag	D	U	LT	I2									
20	With juvenile crania bag	D			I2									

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
X	Bothros 6	P	U	RT	M1		X				20		1	
25	1-9-71	P	L	RT	M1	X					8		1	
25	1-9-71	P	U	RT	M1						8			
25	1-9-71	P	L	LT	C					4			1	
25	1-9-71	P	L	RT	C					4				
25	1-9-71	P	U	RT	I2					3			1	
25	1-9-71	P	U	LT	I1					3				
25	1-9-71	P	U	LT	I2					3				
25	1-9-71	P	U	RT	I1				4.11	2				
25	1-9-71	P	U	RT	PM1					2			1	
25	1-9-71	P	U	RT	PM2					2				
25	1-9-71	P	U	LT	PM2					2				
25	1-9-71	P	U	LT	PM1					2				
25	1-9-71	P	L	RT	M2			Carabelli's Cusp			8		1	
25	1-9-71	P	L	LT	M2						8			
25	1-9-71	P	L	RT	M2	X	X				8		1	
25	1-9-71	P	L	RT	M3	X					8			
25	1-9-71/76	D	U	LT	M1								1	
25	1-9-71/76	D	U	RT	M1									
25	1-9-71	P	U	LT	I1					8			3	
25	1-9-71	P	L	LT	M1									
25	1-9-71	P	L	RT	M1						4			
25	1-9-71	P	L	LT	M2						4			
25	1-9-71	P	U	RT	M1				Carabelli's Cusp		4			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
25	1-9-71	P	U	RT	I1				Shovelling	1				
25	1-9-71	P	U	RT	I2					1				
25	1-9-71	P	L	RT	PM1					2				
25	1-9-71	P	L	LT	PM2							10.5		Repeat
25	1-9-71	P	U	RT	M2						8			
25	1-9-71	P	U	RT	PM					2				
25	1-9-71	P	L		PM			peg-shaped		1				
25	1-9-71	P			I?									
25	1-9-71/76	P	L	LT	M1							2.5		
25	1-9-71/76	P	U	RT	I1							3.5		
25	1-9-71/76	P	L	RT	M2							7.5		
25	1-9-71/76	P	U	RT	I2							5.5		
25	1-9-71/76	P	L	RT	C							4.5		
25	1-9-71/76	P	L	LT	PM2							7.5		Repeat
25	1-9-71/76	D	U	RT	M2							9.5		
25	1-9-71/76	D	L	LT	M2									
25	1-9-71/76	D	L	RT	M2									
25	1-9-71/76	D	U	LT	M1									
25	1-9-71	P	L	RT	M2	X					8			
25	1-9-71	P	L	LT	PM2					2				Repeat

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
26	1-9-51	D	L	LT	M2							1.5m		
26	1-9-51	D	L	RT	M1							4.5m		
26	1-9-51	P	L	LT	C					2				
26	1-9-51	P	L	LT	PM2					2			1	
26	1-9-51	P	L	LT	I2		X			2				
26	1-9-51	P	L	LT	I1		X			2				
26		P	L	RT	I1		X			2				
26	1-9-51	P	L	RT	I2		X							
26	1-9-51	P	L		C		X			5				
27	1-7-78	P	U	RT	M2						12		1	
27	1-7-78	P	U	RT	M3						12			
27	1-7-78	P	U	RT	M1						16		1	
27	1-7-78	P	U	RT	M2	X					16			
27	1-7-78	P	U	LT	I1							4.5	1	
27	1-7-78	P	U	RT	I1							4.5		
27	1-7-78	D	L	RT	M2							7.5m	1	
27	1-7-78	D	L	LT	M1							7.5m		
27	1-7-78	D	L	LT	M2							7.5m		
27	1-7-78	P	U	LT	PM2							6.5	1	
27	1-7-78	P	U	LT	PM1							6.5		
27	1-7-78	P	U	RT	M1	X					20			
27	1-7-78	P	U	RT	M3	X					16			
27	1-7-78	P	U	LT	PM2					2				
27	1-7-78	P	L	RT	M3						4		7	
27	1-7-78	P	U	RT	I1					1				
27	1-7-78	P	U	RT	M1						4			
27	1-7-78	P	U	RT	M1						8			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
27	1-7-78	P	L	RT	M2						4			
27	1-7-78	P	L	RT	M2						0			
27	1-7-78	P	U	RT	C				2.94, 5.46	1				
27	1-7-78	P	U	LT	C					1				Repeat
27	1-7-78	P	L	RT	M1						0			
27	1-7-78	P	U	LT	I1					3				
27	1-7-78	P	U	LT	C				2.41	1				Repeat
27	1-7-78	P	U	RT	C					4				
27	1-7-78	P	U	RT	PM2					2				
27	1-7-78	P	U	LT	C				7.85	1				Repeat
27	1-7-78	P	U	LT	PM1					1				
27	1-7-78	P	U	RT	PM2					1				
27	1-7-78	P	U	RT	M2						24			
27	1-7-78	P	U	RT	PM2					1				
27	1-7-78	P	L	RT	I2					1				
27	1-7-78	P	U	LT	C					5				Repeat
27	1-7-78	P	U	RT	I2					3				
27	1-7-78	P	U	LT	M3						20			
27	1-7-78	P	U		PM1					5				
27	1-7-78	P	U		M	X					20			
27	1-7-78	P	U	LT	M						36			
27	1-7-78	P	L		PM2					6				
27	1-7-78	P	L	RT	PM2					2				
27	1-7-78	P	L	RT	I1					4				
27	1-7-78	P	L	RT	M1						20			
27	1-7-78	P	L		M2						16			
27	1-7-78	P	U	RT	M2						20			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
27	1-7-78	P	L	RT	I1		X			4				
27	1-7-78	P	L	RT	C					5				
27	1-7-78	P	U	LT	I1					5				
27	1-7-78	P	L	RT	I1					4				
27	1-7-78	P	U		M2		X				36			
27	1-7-78	P	U		M3						8			
27	1-7-78	P	U	LT	PM1		X		1.14	5				
27	1-7-78	P	L	RT	I1					4				
27	1-7-78	P	U	RT	I1		X		2.89	5				
27	1-7-78	P	L	LT	PM2					2				
27	1-7-78	P	U	LT	I1					4				
27	1-7-78	P	U		M3						4			
27	1-7-78	P	L		PM2					2				
27	1-7-78	P	U	RT	I2		X		2.80, 4.26	5				
27	1-7-78	P	L	LT	C					5				
27	1-7-78	P	U	RT	I2					2				
27	1-7-78	P	U	LT	C					6				Repeat
27	1-7-78	P	L	LT	M2						20			
27	1-7-78	P			C					7				
27	1-7-78	P	L	LT	C		X		2.30, 3.47	5				
27	1-7-78	P	L		M						36			
27	1-7-78	P	L		M3	X					12			
27	1-7-78	P	L	RT	M3						16			
27	1-7-78	P	L	RT	M2						12			
27	1-7-78	P	L	LT	PM2					2				
27	1-7-78	P	U	LT	I1					5				
27	1-7-78	P	L	LT	M3						8			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
27	1-7-78	P	L		PM					6				
27	1-7-78	P	U	RT	M2					5				
27	1-7-78	P	L	LT	M3							13.5		
27	1-7-78	P	U	RT	M3							13.5		
27	1-7-78	P	U	LT	M1							3.5		
27	1-7-78	P	L	RT	I2					5				
27	1-7-78	P	L	LT	PM2					2				
27	1-7-78	P	U		I									
27	1-7-78	P	L		PM2					7				
27	1-7-78	P	L		M3						36			
27	1-7-78	P	L		M3				1.13, 2.31		16			
27	1-7-78	P	U		M						20			
27	1-7-78	P	U	LT	C									Repeat
27	1-7-78	P			M3						16			
27	1-7-78	D	L	RT	M1									
27	1-7-78	D	L	RT	M2									
27	1-7-78	P	L	LT	M1							4.5		
27	1-7-78	P	L	RT	M1							4.5		
27	1-7-78	P	U	RT	M1							4.5		
27	1-7-78	P	L	RT	M1							3.5		
27	1-7-78	P	L	RT	M1							4.5		
27	1-7-78	D	L	RT	M2									
27	1-7-78	P	L	LT	M2						8			
27	1-7-78	P	U	RT	M1							3.5		
27	1-7-78	P	L	RT	M1							3.5		
27	1-7-78	D	L	LT	M2							5.5		
27	1-7-78	P	L	RT	C							4.5		
27	1-7-78	P	U	LT	C							8.5		Repeat

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
27	1-7-78	P	L	LT	M2							10.5m		
27	1-7-78	D	L	LT	M2									
27	1-7-78	D	U	RT	I1							1.5		
27	1-7-78	D	U	LT	I2					1				
27	1-7-78	P	L	RT	I1									
27	1-7-78	P	L	RT	M							8.5		
27	1-7-78	D	U	RT	M2					5				
27	1-7-78	D	L	LT	C					5				
27	1-7-78	D	L	RT	C									
34	Cranium 2	P	U	RT	PM2					6			1	
34	Cranium 2	P	U	LT	PM1									
38		P	U	RT	I1					3.29, 5.14	16		1	
38		P	U	LT	I1					3.35, 5.56	16			
38		P	L	LT	PM1					5			1	
38		P	L	RT	PM1					5				
38		P	L	RT	M2						4		1	
38		P	L	RT	M3						4			
38		P	U	LT	C					3			1	
38		P	U	LT	PM1				2.46, 3.64	3				
38	1-10-36	P	L	RT	PM1				2.03	5			4	
38	1-10-36	P	U		M3						12			
38	1-10-36	P	U		M3						20			
38	1-10-36	P	L	LT	M1						32			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
38		P	U	LT	I1					2				
38		P	U	LT	I1				3.23, 6.24	5	8			
38		P	U	RT	I1				3.65	4				
38		P	U	RT	C				2.38, 5.09, 7.15	2				
38		P	U	LT	I1					4				
38		P	U	RT	C				3.28	4				
38		P	L	LT	C				3.28, 5.55	3				
38		P	L	RT	C					3				
38		P	L	LT	C				3.63	3				
38		P			C					7				
38		P	U	LT	C					3				
38		P	U	RT	I2			Shovelling		3				Repeat
38		P	U		PM2					6				
38		P	U	LT?	I1					7				
38		P	U	RT	I2				1.32, 3.24	3				Repeat
38		P	U	LT	I2				2.13, 3.78	2				
38		P	U	RT	PM1				3.71	3				
38		P	U		PM2					6				
38		P	L		PM2					3				
38		P	L	RT	PM2				2.53, 4.64	2				
38		P	L		PM2					5				
38		P	U		PM				2.58	6				
38		P	U	LT	I1					7				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
38		P	U	RT	PM2					6				
38		P	L	RT	PM2				2.32, 3.90	6				
38		P	L		PM					7				
38		P	L		PM					6				
38		P	L	RT	C				2.45, 4.13	6				
38		P	U		M3						24			
38		P	L		M1/M2						28			
38		P	U	RT	M1			Carabelli's Cusp			8			
38		P	U		M3						16			
38		P	U	RT	M1						12			
38		P	U	RT	M2						32			
38		P	U		M3						8			
38		P	U		M3						20			
38		P			M3						20			
38		P			M						24			
38		P			M3						20			
38		P			M3						16			
38		D	L	RT	M2							9.5		
38		P	L		M3						20			
38		P	L	LT	M1						8			
38		P	L	RT	M1						12			
38		P	L	LT	M1						16			
38		P	L	RT	PM						20			
38		P	L		M						16			
38		P	L	LT	M2						20			
38		P	L		M						16			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
38		P	L		M						24			
38		P	L	RT	M2						24			
38		P	L		M						28			
38		P	L		M						36			
38		P	U	RT	I2				1.76,3.69	3				Repeat
38		P	L	RT	I2				3.57	4				
38		P	U	RT	I2				2.10,3.34	3				Repeat
38		P	U	LT	I2			Shovelling		2				
38		P	U	LT	I2			Shovelling		2				
38		D	L	LT	I1							5.5		
38		P	L	LT	I1					4				
38		P	L	LT	I1				3.26	3				
38		P	L	LT	I1					3				
38		P	L	RT	I1					4				
38		P	L	LT	I1				2.75	3				
38		P			I2					4				
38		P	L	RT	I2					3				
38		P			I					6				
38		P	U	RT	C					2				
38		P	L	RT	I2				2.74	3				
38		P	U		PM2					6				
38		P	U		PM1					6				
38		P	L	RT	M2						16			
38		P	L		M2						32			
38		P			PM					6				
38		P	L		PM					5				
38		P	U		M2						8			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
38		P	L		PM2					4				
38		P	L		M						20			
38		P	L		PM					6				
40	1-10-78	P	U	RT	C					2			1	
40	1-10-78	P	U	RT	PM1					2				
40	1-10-78	P	U	RT	PM2					2				
40	1-10-78	P	U	RT	M1			Carabelli's Cusp			4			
40	1-10-78	P	U		M3						16		1	
40	1-10-78	P	U	LT	I1				3	4				
40	1-10-78	P	U	RT	M3						4			
40	1-10-78	P	U	LT	PM1					1				
40	1-10-78	P		LT	PM2					2				
40	1-10-78	P	U	RT	C					7				
40	1-10-78	P	L		PM					7				
40	1-10-78	P	U	LT	M2						12			
40	1-10-78	P	U	RT	M2	X					8			
40	1-10-78	P	L	LT	M1						4			
40	1-10-78	P	L	LT	M2						8			
40	1-10-73	P	U	LT	M1									
41	1-10-94	P	L	LT	C				2.92, 5.74	2			1	
41	1-10-94	P	L	LT	PM2					2				
41	1-10-94	P	L	LT	M1						4			
41	1-10-94	P	L	LT	M2						4			
41	1-10-94	P	U	LT	C					3			1	
41	1-10-94	P	U	RT	C				2.74	3				
41	1-10-94	P	L	LT	I1					4			1	

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
41	1-10-94	P	L	RT	I1					4				
41	1-10-94	P	L	LT	I1					3			1	
41	1-10-94	P	L	LT	I2				1.93, 3.31, 4.42	3				
41	1-10-94	P	L	RT	I2					3			1	
41	1-10-94	P	L	LT	I2					3				
41	1-10-94	P	L	LT	I1					3				
41	1-10-94	P	U	LT	PM2							11.5	1	
41	1-10-94	P	U	LT	M1							11.5		
41	Skull 1	P	L	RT	C				2.14, 4.19	4			1	
41	Skull 1	P	L	RT	PM1		X			3				
41	Skull 1	P	L	RT	PM2					4				
41	Skull 1	P	L	RT	M1						36			
41	Skull 1	P	L	RT	M2						36			
41	Skull 1	P	L	RT	M3						36			
41	Skull 2	P	U	RT	M1						4		1	
41	Skull 2	P	U	RT	M2						4			
41	Skull 2	P	L	RT	C				4.08, 6.43	5				
41	Skull 2	P	L	LT	C					3				
41	Skull 2	P	U	RT	I2					2				
41	Skull 2	P	U	RT	PM2	X				2				
41	Skull 2	P	L		PM2					4				
41	Skull 2	P	U	LT	I2					2				
41	Skull 2	P	L	RT	I2					2				
41	Skull 2	D	U	RT	C					2				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
41	Bag: child	D	U	LT	M2							9.5		
41	Bag: child	P	U	LT	I1				1.08, 2.41, 4.00, 5.47, 8.17			9.5		
41	Skull 1	P	U	RT	I1					3				
41	Skull 1	P	L		PM2					2				
42	1-11-25	P	L	RT	PM2					3			1	
42	1-11-25	P	L	RT	M1						12			
42	1-11-25	P	L	RT	M2						12			
42	1-11-25	P	U	LT	PM1					3				
45	1-12-46	P	L	LT	I1				4.4	4			1	
45	1-12-46	P	L	LT	I2				2.8, 4.16	4				
45	1-12-46	P	L	LT	C				2.82, 4.80	6				
45	1-12-46	P	L	LT	PM1				2.17, 3.5	5				
45	1-12-46	P	L	RT	PM1					3				
45	1-12-46	P	L	RT	PM2				3.2	3				
45	1-12-46	P	U	RT	PM2	X			2.57, 4.83	3				
45	1-12-46	P	U	RT	M1						16			
45	1-12-46	P	U	RT	I2					4			1	
45	1-12-46	P	U	RT	C					4				
45	1-12-46	P	U	RT	PM1					3				
45	1-12-46	P	U	LT	I1					6				
45	1-12-46	P	U	LT	C					4				
45	1-12-46	P	U	LT	I1				3.39	3			1	
45	1-12-46	P	U	RT	I1					3				
45	1-12-46	P	U	LT	I2					1			1	

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
45	1-12-46	P	U	RT	I2					1				
45	1-12-46	P	L	LT	C					4			1	
45	1-12-46	P	L	RT	C					4				
45	1-12-46	P	U	LT	C								1	
45	1-12-46	P	U	RT	C				3.50, 5.85, 9.86					
45	1-12-46	P	U	RT	M2					2			1	
45	1-12-46	P	U	LT	M2	X				2				
45	1-12-46	P	U	RT	M1			Carabelli's Cusp				3.5	1	
45	1-12-46	P	U	LT	M1			Carabelli's Cusp				3.5		
45	Juvenile 3	D	L	LT	I1							4.5m	1	
45	Juvenile 3	D	L	RT	I1							4.5m		
45	Juvenile 3	D	L	RT	I2							4.5m		
45	Juvenile 3	D	L	LT	M2							7.5	1	
45	Juvenile 3	P	L	LT	M1							7.5		
45	Juvenile 3	P	L	LT	PM2							7.5		
45	1-12-40	D	L	LT	M2							1.5m	1	
45	1-12-40	D	L	LT	M1							1.5m		
45	1-12-40	D	U	LT	M1							4.5m	1	
45	1-12-40	D	U	RT	M1							4.5m		
45	1-12-46	P	L	LT	M1						0		5	
45	1-12-46	P	U	RT	M1						20			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
45	1-12-46	P	L	RT	C				2.37, 4.09	1				
45	1-12-46	P	L	LT	C					2				
45	1-12-46	P	U	LT	C					4				
45	1-12-46	P	U	RT	C					2				
45	1-12-46	P	L	RT	I2				1.99, 4.36	4				
45	1-12-46	P	U	LT	I2					4				
45	1-12-46	P	U	RT	M1						4			
45	1-12-46	P	U	LT	M1	X		Carabelli's Cusp			16			
45	1-12-46	P	U	RT	M1						28			
45	1-12-46	P	U	RT	M2						0			
45	1-12-46	P	U	LT	M3	X					12			
45	1-12-46	P	U	LT	M3			Carabelli's Cusp			0			
45	1-12-46	P	U	LT	M3	X					0			
45	1-12-46	P	U	RT	M3	X		Carabelli's Cusp			8			
45	1-12-46	P	U	LT	PM1						12			
45	1-12-46	P	U	RT	PM2						12			Repeat
45	1-12-46	P	U	RT	PM1						8			
45	1-12-46	P	U	LT	PM1						8			
45	1-12-46	P	U	LT	PM2						12			
45	1-12-46	P	U	LT	PM1						8			
45	1-12-46	P	U	RT	PM2						8			Repeat
45	1-12-46	P	U	RT	PM2						16			Repeat
45	1-12-46	P	U	RT	PM2									Repeat
45	1-12-46	P	L	LT	M1						20			
45	1-12-46	P	L	RT	M1						8			
45	1-12-46	P	L	RT	M1	X					12			
45	1-12-46	P	L	RT	M2	X					16			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
45	1-12-46	P	L	LT	M2						16			
45	1-12-46	P	L	RT	M2				2.26		12			
45	1-12-46	P	L		M2						20			
45	1-12-46	P	L	RT	M2	X			1.51		12			
45	1-12-46	P	L	RT	M3	X					4			
45	1-12-46	P	L	LT	M3	X					28			
45	1-12-46	P	L	LT	PM2					3				
45	1-12-46	P	L		PM2	X				3				
45	1-12-46	P	L		M3									
45	1-12-46	P	U	LT	I1					5				
45	1-12-46	P	U		PM2							7.5		
45	1-12-46	D	U	RT	M2							7.5		
45	1-12-46	P	U	LT	I1				0.99					
45		P	U	LT	PM1						0			
45	1-12-46	P	U	RT	I1			Shovelling				4.5		
45	1-12-46	P	L	RT	M1							3.5		
45	1-12-46	P	L	LT	M1							1.5		
45	1-12-46	P	L	RT	M2							1.5		
45	1-12-46	P	L	LT	M2							6.5		
45	1-12-46	P	L	RT	M3							13.5		
45	1-12-46	P	L		M									
45	1-12-46	P	U	LT	M1							3.5		
45	1-12-46	P	U	RT	M3							9.5		
45	1-12-46	P	U		M3							9.5		
45	1-12-46	P	U	LT	M3							11.5		
45	1-12-46	P	U	LT	M3									

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
45	1-12-46	P	U		M									
45	1-12-46	P	U	RT	PM2							7.5		Repeat
45	1-12-46	P	U	RT	PM1							6.5		
45	1-12-46	P	U		M3							12.5		
45	1-12-46	P			M									
45	1-12-46	P	U	LT	C							3.5		
45	1-12-46	D	U		M2									
45		D	L	RT	M2									
45		D	U	RT	M2							7.5m		
45		D	U	RT	M1							4.5m		
45		D	L	LT	M2							1.5m		
45		D	U	RT	I2							1.5m		
46	1-11-37	D	L	LT	M1							7.5m	1	
Y	1-4-30	P	U	LT	PM2					3			1	
Y	1-4-30	P	U	LT	PM1					3				
Y	1-4-30	P	U	RT	M3						4			
Y	1-4-30	P	U	RT	M2						4			
Y	1-4-30	P	L	LT	I2					3			1	
Y	1-4-30	P	L	RT	I2					3				
Y	1-4-30	P	L	LT	C					1			1	
Y	1-4-30	P	L	RT	C					1				
Y	1-10-40	D	L	LT	M1								4	
Y	1-10-40	P	L	RT	I2					4				
Y	2-10-12	P	U	RT	I1					4				
Y	2-10-12	P	U	RT	C									
Y	1-4-30	P	U	RT	I2				3.75					
Y	1-4-30	P	U	LT	I2					2				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
Y	1-4-30	P	U	RT	I1					7				
Y	1-4-30	P	L	LT	I2					3				
Y	1-4-30	P	L	LT	I1					3				
Y	1-4-30	P	L	RT	I1					4				
Y	1-4-30	P	L	RT	I2					3				
Y	1-4-30	P	U		I					7				
Y	1-4-30	P	U	LT	C					2				
Y	1-4-30	P	L	LT	C				4.15	5				
Y	1-4-30	P	L	RT	C					5				Repeat
Y	1-4-30	P	L	RT	PM2					4				
Y	1-4-30	P	L	LT	PM1					3				
Y	1-4-30	P	L	LT	PM2					2				
Y	1-4-30	P	U		PM	X				7				
Y	1-4-30	P	U		PM2					6				
Y	1-4-30	P	U		M						36			
Y	1-4-30	P	U		M						36			
Y	1-4-30	P	U	LT	M2						16			
Y	1-4-30	P	L		M2	X					36			
Y	1-4-30	P	L	RT	M2						32			
Y	1-4-30	P	U		M3						8			
Y	1-4-30	P	U		M3						8			
Y	1-4-30	P	U		M	X					20			
Y	1-4-30	P	L		M3						8			
Y	1-4-30	P	U	RT	I2				1.66, 2.82	5				
Y	1-4-30	P	U	LT	I2					5				
Y	1-4-30	P	L	RT	I2					3				
Y	1-4-30	P	L	RT	I1					4				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
Y	1-4-30	P	L	LT	I1					5				
Y	1-4-30	P	L	RT	I1					3				
Y	1-4-30	P	U	RT	C					1				
Y	1-4-30	P	L	RT	C					2				Repeat
Y	1-4-30	P		LT	I1?					3				
Y	1-4-30	P		LT	I2?					6				
Y	1-4-30	P	L	RT	C				2.81	5				Repeat
Y	1-4-30	P	L	RT	C	X				5				Repeat
Y	1-4-30	P	U	RT	I1					6				
Y	1-4-30	P	L		PM					2				
Y	1-4-30	P	L	LT	PM1					2				
Y	1-4-30	P	U	LT	C					6				
Y	1-4-30	P	L	RT	PM									
Y	1-4-30	P	L	RT	M1						8			
PLG	1-4-31	P	L	RT	M1						20		1	
PLG	1-4-31	P	L	RT	M2	X					16			
PLG	1-4-31	P	L	RT	M3	X					12			
PLG	1-4-31	P	U	RT	PM1					1			1	
PLG	1-4-31	P	U	RT	PM2					1				
PLG	2-4-7	P	L	LT	I2							6.5	1	
PLG	2-4-7	P	L	LT	C							6.5		
PLG	2-4-7	P	L	RT	PM1							6.5		
PLG	1-04-26	P	U	LT	I1			Shovelling	1.87, 3.54, 5.58 6.96, 9.45			4.5	1	
PLG	1-04-26	P	U	RT	I1			Shovelling	1.74, 3.27, 5.27, 6.87, 9.02			4.5		
PLG	1-04-26	P	U	LT	M2			Carabelli's Cusp				7.5	1	

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-04-26	D	L	LT	C					3				
PLG	1-4-31	P	U	RT	PM1						24		1	
PLG	1-4-31	P	U	RT	PM2						24			
PLG	1-04-26	P	L	LT	I2					5			1	
PLG	1-04-26	P	L	LT	I1					4				
PLG	1-04-26	P	L	RT	I1					4				
PLG	1-04-26	P	L	RT	I2					3				
PLG	1-04-26	P	L	RT	C					2				
PLG	1-4-31	P	U	RT	PM2					4			1	
PLG	1-4-31	P	U	RT	M1	X	X				16			
PLG	1-4-31	P	U	RT	M2	X					16			
PLG	1-4-31	P	L	RT	PM1					3			1	
PLG	1-4-31	P	L	RT	M1						20			
PLG	1-4-31	P	L	RT	M2						8			
PLG	1-4-31	P	L	RT	PM2					6			1	
PLG	1-4-31	P	L	RT	M1						40			
PLG	1-4-31	P	L	RT	M2						4		1	
PLG	1-4-31	P	L	RT	M1						4			
PLG	1-4-31	P	L	LT	M1						4			
PLG	1-4-31	P	L	LT	I2					4			1	
PLG	1-4-31	P	U	LT	I1					4				
PLG	1-4-31	P	U	LT	I1				2.22	4			1	
PLG	1-4-31	P	U	LT	I2					4				
PLG	1-4-31	P	U	RT	I1					5			1	
PLG	1-4-31	P	U	LT	I1					5				
PLG	1-4-31	P	U	RT	I2					5				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-4-31	P	U	RT	I1					6			1	
PLG	1-4-31	P	U	LT	I1					6				
PLG	1-4-31	P	U	RT	I2				1.63, 2.70, 4.50	4			1	
PLG	1-4-31	P	U	LT	I2					4				
PLG	1-4-31	P	L	LT	C					4			1	
PLG	1-4-31	P	L	RT	C					4				
PLG	1-4-31	P	L	LT	C					5			1	
PLG	1-4-31	P	L	RT	C				0.99, 2.43	5				
PLG	1-04-28	P	U	RT	I1				1.70, 3.63, 5.74			6.5	1	
PLG	1-04-28	P	U	LT	I1				1.96, 4.06, 7.58, 10.70			6.5		
PLG	2-04-07	D	U	LT	I2			Shovelling					1	
PLG	2-04-07	D	U	LT	I1			Shovelling						
PLG	1-4-28 + 2-4-7 + 1-4-31	P	L	RT	C								10	
PLG	1-4-31	P	L	RT	PM2	X								
PLG	1-4-31	P	L	LT	M2						20			
PLG	1-4-31	P	L	LT	PM1					2				
PLG	1-4-31	P	L	LT	PM2					2				
PLG	1-04-28	P	U	LT	C				2.37	4				
PLG	1-04-28	P	U	LT	M1	X					16			
PLG	1-04-28	P	L	RT	M2						12			
PLG	1-04-28	P			M3						4			
PLG	1-04-28	P	U	RT	M2						4			
PLG	1-04-28	P	U	LT	PM1					1				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-04-28	P	U		PM2					4				
PLG	1-04-28	P	L	RT	PM1					5				
PLG	1-04-28	P	L	RT	PM2					5				
PLG	1-04-28	P	L		PM					5				
PLG	1-04-28	P	L		PM2					3				
PLG	1-04-28	P	L	LT	PM2	X				5				
PLG	1-04-28	P	L		M2						36			
PLG	1-04-28	P	L		M2						16			
PLG	1-04-28	P	U		M						16			
PLG	1-04-28	P	L		M						20			
PLG	1-04-28	P	L		M						20			
PLG	1-04-28	P	U	RT	I1				2.23, 5.25, 7.45	5				Repeat
PLG	1-04-28	P	L	RT	I2					3				
PLG	1-04-28	P	L	RT	C					4				
PLG	1-04-28	P	L	RT	I1					6				
PLG	1-4-54	P	U	LT	PM1				2.64	2				
PLG	1-04-26	P	U	LT	C				2.22, 4.24, 6.95			5.5		
PLG	1-04-26	P	U	LT	M1				1.40, 2.39, 3.79					
PLG	1-04-26	P	L	RT	M1							3.5		
PLG	1-04-26	P	U	RT	M1							6.5		
PLG	1-04-26	P	U	LT	PM1				2.85, 4.21			6.5		
PLG	1-04-26	P	U	LT	PM2							7.5		
PLG	1-04-26	P	U	RT	PM1				2.4			6.5		
PLG	1-04-26	P	U	RT	PM2				1.95			7.5		
PLG	1-04-26	P	U	LT	M2							7.5		
PLG	1-04-26	P	L	LT	M2						16			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-04-26	P	L	LT	M						36			
PLG	1-04-26	P	L	RT	I1							6.5		
PLG	1-04-26	P	L	LT	M2	X					4			
PLG	1-04-26	P	U	LT	M1	X					20			
PLG	1-04-26	P	L		PM2					6				
PLG	1-04-26	P	U	RT	I1					5				Repeat
PLG	1-04-26	P	U	RT	I2					5				
PLG	1-04-20	P	L		M2						32			
PLG	1-04-20	P	U	LT	C					6				
PLG	1-04-20	P	L	RT	PM2					6				
PLG	1-04-20	P	L	RT	C					6				
PLG	1-4-31	P	U	RT	M1						4			
PLG	1-4-31	P	U		M	X					36			
PLG	1-4-31	P	L	LT	PM2					2				
PLG	1-4-31	P	L		PM2					3				
PLG	1-4-31	P	L		PM	X				5				
PLG	1-4-31	P	L	LT	M1						12			
PLG	1-4-31	P	L	LT	M1	X					16			
PLG	1-4-31	P	L	RT	M2						20			
PLG	1-4-31	P	L	LT	M2						24			
PLG	1-4-31	P	L	LT	I2					1				
PLG	1-4-31	P	U	RT	I1					5				Repeat
PLG	1-4-31	P	U	LT	M2						0			
PLG	1-4-31	P	U		M	X					20			
PLG	1-4-31	P	U		M3	X					16			
PLG	1-4-31	P	U		M3						16			
PLG	1-4-31	P	U		M3						16			
PLG	1-4-31	P	U	RT	M1						4			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-4-31	P	U	LT	M2?	X					24			
PLG	1-4-31	P	U		M2						20			
PLG	1-4-31	P	U	LT	M3						0			
PLG	1-4-31	P	U		M						36			
PLG	1-4-31	P	U		M						24			
PLG	1-4-31	P	U	RT	M3			Carabelli's Cusp			8			
PLG	1-4-31	P	U	LT	M3						4			
PLG	1-4-31	P	U	LT	M3						4			
PLG	1-4-31	P	U	RT	M3						16			
PLG	1-4-31	P			M3	X					0			
PLG	1-4-31	P	U		M3						0			
PLG	1-4-31	P	L		M3						4			
PLG	1-4-31	P	U	RT	M3			Carbelli's Cusp			8			
PLG	1-4-31	P	U	RT	M3						16			
PLG	1-4-31	P	L	LT	M3						12			
PLG	1-4-31	P	L		M3						8			
PLG	1-4-31	P			M3	X					8			
PLG	1-4-31	P	L	LT	M3						8			
PLG	1-4-31	P	L	LT	M2						20			
PLG	1-4-31	P	L	LT	M2						12			
PLG	1-4-31	P	L	RT	M2	X					12			
PLG	1-4-31	P	L	LT	M2	X					8			
PLG	1-4-31	P			M						16			
PLG	1-4-31	P	L	RT	M1						12			
PLG	1-4-31	P	L	RT	M1						32			
PLG	1-4-31	P	L	RT	M1						36			
PLG	1-4-31	P	L	RT	M1						20			
PLG	1-4-31	P	L	RT	I1				2.09, 4.25			6.5		

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-4-31	P	L	RT	I2		X					6.5		
PLG	1-4-31	P	L	RT	I2				2.83	4				
PLG	1-4-31	P	L	RT	I2				4.75	4				
PLG	1-4-31	P	L	RT	I1					3				
PLG	1-4-31	P	L	RT	I1									
PLG	1-4-31	P	L		I1					7				
PLG	1-4-31	P	L	RT	I2					1				
PLG	1-4-31	P	L		I					5				
PLG	1-4-31	P	L		I					7				
PLG	1-4-31	P	L	RT	I	X			3.94	7				
PLG	1-4-31	P	U	RT	I1					3				Repeat
PLG	1-4-31	P	U	LT	I1				3.11	2				
PLG	1-4-31	P	U	RT	I1					1				Repeat
PLG	1-4-31	P	U		I1					6				
PLG	1-4-31	P	U	RT	I1					3				Repeat
PLG	1-4-31	P	U	LT	I1					4				
PLG	1-4-31	P	U	RT	I1					5				Repeat
PLG	1-4-31	P	U	RT	I1			Shovelling		3				Repeat
PLG	1-4-31	P	U	RT	I1					5				Repeat
PLG	1-4-31	P	U	RT	I1					5				Repeat
PLG	1-4-31	P	U	RT	I2					3				
PLG	1-4-31	P	U	RT	I2					5				
PLG	1-4-31	P	L	LT	C					4				
PLG	1-4-31	P	U	RT	I2					3				
PLG	1-4-31	P	U	LT	I2					3				
PLG	1-4-31	P	U	LT	I2					4				
PLG	1-4-31	P	U	LT	I2					4				
PLG	1-4-31	P	U	LT	I2	X			2.78	5				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-4-31	P	U		I					6				
PLG	1-4-31	P	U	LT	I2				4.25	4				
PLG	1-4-31	P	U	LT	C					4				
PLG	1-4-31	P	U	LT	C				2.58, 3.65	4				
PLG	1-4-31	P	U	LT	C					5				
PLG	1-4-31	P	U	LT	I2					3				
PLG	1-4-31	D	L	RT	C				3.21			8.5		
PLG	1-4-31	P	U	LT	C					5				
PLG	1-4-31	P	U	LT	C					4				
PLG	1-4-31	P	L	LT	C					4				
PLG	1-4-31	P	L	LT	C				2.46, 5.70	5				
PLG	1-4-31	P	L	RT	C					4				
PLG	1-4-31	P	L	LT	C				2.78, 3.65, 5.56	4				
PLG	1-4-31	P	L	LT	C				4.56	4				
PLG	1-4-31	P	U	RT	C					6				
PLG	1-4-31	P	L	LT	C				4.46	5				
PLG	1-4-31	P	U	LT	C					2				
PLG	1-4-31	P	U	RT	C				2.52	3				
PLG	1-4-31	P	U	RT	C					2				
PLG	1-4-31	P	U		C?					4				
PLG	1-4-31	P	U	RT	C				2.06, 3.00, 6.43	4				
PLG	1-4-31	P	L	RT	C					3				
PLG	1-4-31	P	L	RT	C					2				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-4-31	P	L	LT	C					5				
PLG	1-4-31	P	L	RT	C				2.44, 3.76	6				
PLG	1-4-31	P	L	RT	C					1				
PLG	1-4-31	P	L	RT	C				2.22, 22.78, 4.44	1				
PLG	1-4-31	P	L	RT	C					1				
PLG	1-4-31	P	L		PM2					6				
PLG	1-4-31	P	L	LT	PM2					4				
PLG	1-4-31	P	L		PM2				2.62	4				
PLG	1-4-31	P	L	LT	PM1					3				
PLG	1-4-31	P	L		PM					6				
PLG	1-4-31	P	L	RT	PM					5				
PLG	1-4-31	P	L		PM2					5				
PLG	1-4-31	P	L		PM	X				5				
PLG	1-4-31	P	L	LT	PM1					4				
PLG	1-4-31	P	L	LT	PM1					3				
PLG	1-4-31	P	L	LT	PM2					3				
PLG	1-4-31	P			PM					4				
PLG	1-4-31	P			PM					5				
PLG	1-4-31	P	L	LT	PM2					2				
PLG	1-4-31	P	L	RT	PM					3				
PLG	1-4-31	P	U	LT	PM1					5				
PLG	1-4-31	P	U		PM2					4				
PLG	1-4-31	P	U	RT	PM1					4				
PLG	1-4-31	P	U		PM2					5				
PLG	1-4-31	P	U	RT	PM1					4				
PLG	1-4-31	P	U	LT	PM2					3				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-4-31	P	U	LT	PM2					3				
PLG	1-4-31	P			PM					7				
PLG	1-4-31	P	U	RT	PM2					6				
PLG	1-4-31	P	U		PM					5				
PLG	1-4-31	P	L	LT	PM					3				
PLG	1-4-31	P	U		PM2				2.48	5				
PLG	1-4-31	P	U		PM2	X				4				
PLG	1-4-31	P	L		PM					6				
PLG	1-4-31	P	U	LT	PM1							11.5		
PLG	1-4-31	P	U	LT	PM1							11.5		
PLG	1-4-31	P	U		PM					2				
PLG	1-4-31	P			PM					5				
PLG	1-4-31	P	U		PM					6				
PLG	1-4-31	P	U		PM2					6				
PLG	1-04-28	P	U	LT	M1				1.51, 2.9, 3.64			6.5		
PLG	1-04-28	P	L	RT	M2							11.5		
PLG	1-04-28	P	L	LT	C				1.35, 2.86, 3.7, 4.62, 6.54, 9.37			5.5		
PLG	1-04-28	P	U	RT	C				1.97, 2.92, 4.99, 7.29			7.5		
PLG	1-04-28	P	L	RT	PM1							10.5		
PLG	1-04-28	P	L	LT	PM2							10.5		
PLG	1-04-28	P	U		M3							16.5		
PLG	1-04-28	P	U	RT	M3							13.5		
PLG	2-04-07	D	U	RT	M2							1.5		
PLG	2-04-07	D	U	RT	M2			Carabelli's Cusp						
PLG	2-04-07	D	L	LT	M2									
PLG	2-04-07	D	U	LT	M2									
PLG	2-04-07	D	U	RT	M2									

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	2-04-07	D	U	RT	M1							8.5		
PLG	2-04-07	D	L	RT	M2									
PLG	2-04-07	D	L	LT	M1									
PLG	2-04-07	D	U	RT	M1							8.5		
PLG	2-04-07	D	U	RT	I1									
PLG	2-04-07	D	U	LT	I1							8.5		
PLG	2-04-07	D	U	LT	M1							10.5m		
PLG	2-04-07	D	U	LT	M2									
PLG	2-04-07	D	U	RT	I2							6.5		
PLG	2-04-07	D	L	RT	M2							10.5m		
PLG	2-04-07	P	L	LT	PM2							5.5		
PLG	2-04-07	P	U	RT	I1/I2					3				
PLG	2-04-07	P	U	LT	I1/I2			Shovelling	1.5,3.63	2				

Table 1. Full inventory of loose, unassociated teeth from Ismenion Hill. Red boxes represent individuals. Smith (1984) wear scores fall within 1-8, light to heavy. Scott (1979) wear score sums fall within 0-40, light to heavy. Under notes, “repeat” identifies teeth that are used to calculate MLNI as they are the highest repeated tooth type within that grave. Under LATD, m=months. Under notes, “SRA” identifies teeth with Short Root Anomaly. PLG=parking lot grave; P=permanent; D=deciduous; U=upper; L=lower; LT=left; RT=right; X=present; LATD=London Atlas of Tooth Development; MLNI=minimum likely number of individuals; LEH=linear enamel hypoplasia; m=months.

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
4	Youngest Individual	P	L	RT	M3						4			
4	Youngest Individual	P	L	RT	M2						4			
4	Youngest Individual	P	L	RT	M1						4			
4	Youngest Individual	P	L	RT	PM2					2			1	
4	Youngest Individual	P	L	RT	PM1					2				
4	Youngest Individual	P	L	RT	C					2				
4	Youngest Individual	P	L	RT	I2					2				
4	Youngest Individual	P	L	LT	I2					2				
4	Youngest Individual	P	L	LT	C					2				
4	Youngest Individual	P	L	LT	PM1					2				
4	Youngest Individual	P	L	LT	PM2					2				
4	Youngest Individual	P	L	LT	M1						4			
4	Youngest Individual	P	L	LT	M2					1				
4	Older Individual	P	L	RT	M3		X				16			
4	Older Individual	P	L	RT	M2		X				16			
4	Older Individual	P	L	RT	M1		X				16			
4	Older Individual	P	L	RT	PM2		X		1.27, 2.19	2				
4	Older Individual	P	L	RT	PM1		X			2				
4	Older Individual	P	L	RT	C		X			2				
4	Older Individual	P	L	RT	I2		X			2			1	
4	Older Individual	P	L	LT	C				4.35, 4.94	2				
4	Older Individual	P	L	LT	PM1					2				
4	Older Individual	P	L	LT	PM2				1.41, 2.00	2				
4	Older Individual	P	L	LT	M1		X				16			
4	Older Individual	P	L	LT	M2						16			
4	Older Individual	P	L	LT	M3						16			
4	Odd Maxilla	P	U	RT	M3						4			
4	Odd Maxilla	P	U	RT	M2						4		1	

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
4	Odd Maxilla	P	U	RT	M1						12			
4	Odd Maxilla	P	U	RT	PM2					2				
4	Odd Maxilla	P	U	RT	PM1					2				
4	Odd Maxilla	P	U	RT	C					2				
4	Odd Maxilla	P	U	LT	C					2				loose
4	Odd Maxilla	P	U	LT	PM1					3				
4	Odd Maxilla	P	U	LT	M1						16			
4	Odd Maxilla	P	U	LT	M2						8			
4	Odd Maxilla	P	U	LT	M3						8			
12		P	U	RT	M3		X				16		1	
12		P	U	RT	PM2		X			4				
12		P	U	RT	I2		X			4				
12		P	U	RT	I1					4				
12		P	U	LT	I1					4				
12		P	U	LT	I2					4				
12		P	U	LT	C					4				
12		P	U	LT	PM1				1.37, 3.05	4				
12		P	L	RT	M2		X				16			
12		P	L	RT	M1	X	X				16			
12		P	L	RT	PM2		X			4				
12		P	L	RT	PM1		X			4				
12		P	L	RT	C		X			4				
12		P	L	RT	I2		X			4				
12		P	L	RT	I1		X			4				
12		P	L	LT	I1		X			4				
12		P	L	LT	I2					4				
12		P	L	LT	C				1.57, 2.71, 5.69	4				
12		P	L	LT	PM1				2.54, 3.86	4				
12		P	L	LT	PM2				3.37	4				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
12		P	L	LT	M1	X					16			
12	Skeleton 3	P	L	RT	M2						12			
12	Skeleton 3	P	L	RT	M1						12			
12	Skeleton 3	P	L	RT	PM2					2				
12	Skeleton 3	P	L	LT	PM1					2				
12	Skeleton 3	P	L	LT	M1	X					12		1	
12	Skeleton 3	P	L	LT	M2	X					12			
12	Skeleton 3	P	L	LT	M3						12			
12	Skeleton 5	P	U	RT	I1					3				Loose
12	Skeleton 5	P	U	LT	I2				2.07	3				
12	Skeleton 5	P	U	LT	C				2.37	3				
12	Skeleton 5	P	L	RT	M1						16			
12	Skeleton 5	P	L	RT	PM2		X		1.01, 2.45	3				
12	Skeleton 2	P	U	RT	PM1					3				
12	Skeleton 2	P	U	RT	C					3				
12	Skeleton 2	P	U	RT	I1					3				
12	Skeleton 2	P	U	LT	I1					3				
12	Skeleton 2	P	U	LT	I2					3				
12	Skeleton 2	P	U	LT	C					3				
12	Skeleton 2	P	U	LT	PM1									
12	Skeleton 2	P	U	LT	PM2					3			1	
12	Skeleton 2	P	U	LT	M1						8			
12	Skeleton 2	P	U	LT	M2	X					8			
12	Skeleton 2	P	U	LT	M3						8			
12	Skeleton 2	P	L	LT	I1					3				
12	Skeleton 2	P	L	LT	I2					3				
12	Skeleton 2	P	L	LT	C				3.16	3				
12	Skeleton 2	P	L	LT	PM1					3				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
12	Skeleton 2	P	L	LT	M2						12			
19	Youngest Adult	P	U	RT	M2		X						1	
19	Youngest Adult	P	U	RT	M1		X							
19	Youngest Adult	P	U	RT	PM2		X							
19	Youngest Adult	P	U	RT	PM1		X							
19	Youngest Adult	P	U	RT	C		X							
19	Youngest Adult	P	U	LT	I2		X		2.52, 3.60					
19	Youngest Adult	P	U	LT	C		X							
19	Youngest Adult	P	U	LT	PM1		X							
19	Youngest Adult	P	U	LT	PM2		X							
19	Youngest Adult	P	U	LT	M1		X							
19	Youngest Adult	P	U	LT	M3		X							
19	Youngest Adult	P	L	RT	M3		X				4			
19	Youngest Adult	P	L	RT	M2		X				4			
19	Youngest Adult	P	L	RT	M1	X	X				4			
19	Youngest Adult	P	L	RT	PM2		X			2				
19	Youngest Adult	P	L	RT	C		X			2				
19	Youngest Adult	P	L	RT	I2		X			2				
19	Youngest Adult	P	L	LT	C		X			2				
19	Youngest Adult	P	L	LT	PM1		X			2				
19	Youngest Adult	P	L	LT	PM2		X			2				
19	Youngest Adult	P	L	LT	M1	X	X				4			
19	Youngest Adult	P	L	LT	M2		X				4			
19	Youngest Adult	P	L	LT	M3		X				4			
19	Juvenile	D	U	RT	M2								1	
19	Juvenile	D	U	RT	M1									
19	Juvenile	D	U	RT	C									
19	Juvenile	D	U	RT	I2									loose

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
19	Juvenile	D	U	RT	I1									loose
19	Juvenile	D	U	LT	C									
19	Juvenile	D	U	LT	M1									
19	Juvenile	D	U	LT	M2									
19	Juvenile	D	L	LT	M2									loose
19	Juvenile	P	U	LT	M1									
19	Skeleton 7B	P	U	LT	C				0.93, 1.97, 3.19	3				
19	Skeleton 7B	P	U	LT	PM1		X			3			1	
19	Skeleton 7B	P	U	LT	PM2		X			3				
19	Skeleton 7B	P	U	LT	M1		X				16			
19	Skeleton 7B	P	L	RT	M3						12			
19	Skeleton 7B	P	L	RT	M2						12			
19	Skeleton 7B	P	L	RT	PM2		X			3				loose
19	Skeleton 7B	P	L	RT	C		X		1.09, 3.24, 4.33	3				loose
19	Skeleton 7B	P	L	LT	I1		X			4				loose
19	Skeleton 7B	P	L	LT	I2		X		1.24, 2.10, 2.59	4				loose
19	Skeleton 7B	P	L	LT	C				2.87, 3.86	4				
19	Skeleton 7B	P	L	LT	PM1		X			3				
19	Skeleton 7B	P	L	LT	M2						8			
19	Skeleton 3	P	U	LT	I2					1				loose
19	Skeleton 3	P	U	LT	PM1					1				
19	Skeleton 3	P	U	LT	PM2					1				
19	Skeleton 3	P	U	LT	M1						4			
19	Skeleton 3	P	U	LT	M2						4		1	
19	Skeleton 3	P	L	RT	M2		X				4			
19	Skeleton 3	P	L	RT	M1						4			loose
19	Skeleton 3	P	L	RT	I1					2				loose
19	Skeleton 3	P	L	LT	M1						4			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
19	Skeleton 3	P	L	LT	M2						4			
19	Skeleton 3	P	U	LT	I1					2				
19	Skeleton 4	P	U	RT	M3						4		1	
19	Skeleton 4	P	U	RT	M2		X				4			
19	Skeleton 4	P	U	RT	PM1					3				
19	Skeleton 4	P	U	LT	I2					4				loose
19	Skeleton 4	P	U	LT	C					5				
19	Skeleton 4	P	U	LT	PM1					3				
19	Skeleton 4	P	U	LT	M2						4			
19	Skeleton 4	P	U	LT	M3						4			
19	Skull 5	P	U	RT	M2						36		1	
19	Skull 5	P	U	RT	M1		X				36			
19	Skull 5	P	U	RT	C		X							loose
19	Skull 5	P	U	RT	I1									loose
19	Skull 5	P	U	LT	I1									
19	Skull 5	P	U	LT	PM1		X			6				
19	Skull 5	P	U	LT	M2		X				28			
19	Skull 5	P	L	RT	M2	X					32			
19	Skull 5	P	L	RT	M1	X					32			
19	Skull 5	P	L	RT	PM2	X				5				
19	Skull 5	P	L	RT	PM1					5				
19	Skull 5	P	L	RT	C		X		2.63, 5.08	5				
19	Skull 5	P	L	RT	I2				2.35	5				
19	Skull 5	P	L	RT	I1					5				
19	Skull 5	P	L	LT	I1		X			5				
19	Skull 5	P	L	LT	I2		X			5				
19	Skull 5	P	L	LT	C		X		2.69, 3.87	5				
19	Skull 5	P	L	LT	PM1		X		2.16	5				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
19	Skull 5	P	L	LT	PM2		X			5				
19	Skull 5	P	L	LT	M1		X				32			
19	Skull 5	P	L	LT	M2						32			
19	Skeleton 11	P	L	RT	M3		X				16		1	
19	Skeleton 11	P	L	RT	M2	X					16			
19	Skeleton 11	P	L	RT	PM1		X		3.81	4				loose
19	Skeleton 11	P	L	RT	PM2		X			3				loose
19	Skeleton 11	P	L	RT	C		X		3.77	4				loose
19	Skeleton 11	P	L	RT	I2		X			3				loose
19	Skeleton 11	P	L	RT	I1		X		2.84	3				loose
19	Skeleton 11	P	L	LT	I1		X			3				loose
19	Skeleton 11	P	L	LT	C		X		2.93	2				
19	Skeleton 11	P	L	LT	PM1		X		3.15	2				
19	Skeleton 11	P	L	LT	PM2	X	X			3				
19	Skeleton 11	P	L	LT	M1		X				20			
19	Skeleton 11	P	L	LT	M2	X	X				8			
19	Skeleton 11	P	L	LT	M3		X				8			
19	Skull 12	P	U	RT	M2						24			
19	Skull 12	P	U	RT	M1						28			
19	Skull 12	P	U	RT	PM2					6				loose
19	Skull 12	P	U	RT	I1					4				loose
19	Skull 12	P	U	LT	I1					4				
19	Skull 12	P	U	LT	I2		X			3			1	
19	Skull 12	P	U	LT	C		X			3				
19	Skull 12	P	L	RT	M3		X				20			
19	Skull 12	P	L	RT	M2		X				24			
19	Skull 12	P	L	RT	M1						28			
19	Skull 12	P	L	RT	PM2					5				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
19	Skull 12	P	L	RT	PM1		X							
19	Skull 12	P	L	RT	C		X			4				
19	Skull 12	P	L	RT	I2		X			3				
19	Skull 12	P	L	RT	I1									
19	Skull 12	P	L	LT	I1		X			3				
19	Skull 12	P	L	LT	I2		X			3				
19	Skull 12	P	L	LT	C		X			3				
19	Skull 12	P	L	LT	PM1		X			3				
19	Skull 12	P	L	LT	PM2		X			3				
19	Skull 12	P	L	LT	M1		X				20			
19	Skull 12	P	L	LT	M2		X				20			
19	Skull 12	P	L	LT	M3		X				16			
19	Skeleton 13	P	U	RT	M3		X				4		1	
19	Skeleton 13	P	U	RT	M3		X				4			
19	Skeleton 13	P	U	RT	M1		X				4			
19	Skeleton 13	P	U	RT	I2									
19	Skeleton 13	P	U	LT	I1				2.28, 2.78, 4.07	4				
19	Skeleton 13	P	U	LT	I2				2.87, 3.54, 4.20	2				
19	Skeleton 13	P	U	LT	C		X		2.64, 3.47, 4.07	2				
19	Skeleton 13	P	U	LT	PM1		X			2				
19	Skeleton 13	P	U	LT	PM2		X			2				
19	Skeleton 13	P	U	LT	M1	X	X				16			
19	Skeleton 13	P	U	LT	M2		X				8			
19		P	U	RT	M3		X				16			
19		P	U	RT	M2		X				16			
19		P	U	RT	M1		X				16		1	
19		P	U	RT	PM2		X			3				
19		P	U	RT	PM1		X			3				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
19		P	U	RT	C		X			3				
19		P	U	RT	I2		X			3				
19		P	U	RT	I1		X			3				
19		P	U	LT	I1		X			3				
19		P	U	LT	I2		X			3				
19		P	U	LT	C		X			3				
19		P	U	LT	PM1		X			3				
19		P	U	LT	PM2		X			3				
19		P	U	LT	M1		X				8			
19		P	U	LT	M2		X				8			
19		P	L	RT	M3		X				8			
19		P	L	RT	M2		X				8			
19		P	L	RT	M1		X				16			
19		P	L	RT	C		X			3				
19		P	L	RT	I2		X			4				
19		P	L	RT	I1		X			4				
19		P	L	LT	I1		X			5				
19		P	L	LT	I2		X			5				
19		P	L	LT	C		X			5				
19		P	L	LT	PM1		X			4				
19		P	L	LT	PM2		X			3				
19		P	L	LT	M1		X				20			
19		P	L	LT	M2		X				16			
20	Skeleton A "Younge Female"	P	U	RT	M2						4			
20	Skeleton A "Younge Female"	P	U	RT	M1						4		1	
20	Skeleton A "Younge Female"	P	U	RT	PM2					1				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	Skeleton A "Younge Female"	P	U	RT	PM1					1				
20	Skeleton A "Younge Female"	P	U	RT	C									
20	Skeleton A "Younge Female"	P	U	RT	I2					3				
20	Skeleton A "Younge Female"	P	U	RT	I1					3				
20	Skeleton A "Younge Female"	P	U	LT	PM1					3				
20	Skeleton A "Younge Female"	P	U	LT	PM2					3				
20	Skeleton A "Younge Female"	P	U	LT	M1						4			
20	Skeleton A "Younge Female"	P	U	LT	M2						4			
20	Skeleton A "Younge Female"	P	L	RT	M2						4			
20	Skeleton A "Younge Female"	P	L	RT	M1						8			
20	Skeleton A "Younge Female"	P	L	RT	PM2					3				
20	Skeleton A "Younge Female"	P	L	RT	PM1					3				
20	Skeleton A "Younge Female"	P	L	RT	C					3				
20	Skeleton A "Younge Female"	P	L	RT	I2					3				
20	Skeleton A "Younge Female"	P	L	RT	I1					3				
20	Skeleton A "Younge Female"	P	L	LT	I1					2				
20	Skeleton A "Younge Female"	P	L	LT	I2					2				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	Skeleton A "Younge Female"	P	L	LT	PM2					1				
20	Skeleton A "Younge Female"	P	L	LT	M1						4			
20	Skeleton A "Younge Female"	P	L	LT	M2						4			
20	Skull B	P	U	RT	M3						8		1	
20	Skull B	P	U	RT	M2						8			
20	Skull B	P	U	RT	M1	X					16			
20	Skull B	P	U	RT	PM2					3				
20	Skull B	P	U	RT	PM1					3				
20	Skull B	P	U	RT	C					3				
20	Skull B	P	U	RT	I2					3				
20	Skull B	P	U	RT	I1					4				
20	Skull B	P	U	LT	I1					4				
20	Skull B	P	U	LT	I2					3				
20	Skull B	P	U	LT	C					3				
20	Skull B	P	U	LT	PM1					3				
20	Skull B	P	U	LT	PM2					3				
20	Skull B	P	U	LT	M1			Carabelli's Cusp			12			
20	Skull B	P	U	LT	M2						12			
20	Skull B	P	U	LT	M3						8			
20	Skull B	P	L	RT	M3						4			
20	Skull B	P	L	RT	M2						4			
20	Skull B	P	L	RT	M1						16			
20	Skull B	P	L	RT	PM1					2				
20	Skull B	P	L	RT	PM2					3				
20	Skull B	P	L	LT	I1					3				
20	Skull B	P	L	LT	I2				2.9	3				
20	Skull B	P	L	LT	C				1.91, 3.41, 5.04	2				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	Skull B	P	L	LT	PM1					2				
20	Skull B	P	L	LT	PM2					2				
20	Skull B	P	L	LT	M1						12			
20	Skull B	P	L	LT	M2						8			
20	Skull B	P	L	LT	M3						8			
20	Skeleton 2 C "Largest Male"	P	U	RT	M2		X				12		1	
20	Skeleton 2 C "Largest Male"	P	U	RT	PM2				1.57	6				
20	Skeleton 2 C "Largest Male"	P	U	RT	PM1		X		2.67, 3.32	4				
20	Skeleton 2 C "Largest Male"	P	U	RT	C				2.50, 3.74	5				
20	Skeleton 2 C "Largest Male"	P	U	RT	I2	X	X			4				
20	Skeleton 2 C "Largest Male"	P	U	RT	I1					4				
20	Skeleton 2 C "Largest Male"	P	U	LT	I1		X			4				
20	Skeleton 2 C "Largest Male"	P	U	LT	I2					3				
20	Skeleton 2 C "Largest Male"	P	U	LT	M2		X				16			
20	Skeleton 2 C "Largest Male"	P	L	RT	M3		X				12			
20	Skeleton 2 C "Largest Male"	P	L	RT	M2	X	X				12			
20	Skeleton 2 C "Largest Male"	P	L	RT	M1	X					24			
20	Skeleton 2 C "Largest Male"	P	L	RT	PM2		X		2.64, 3.35	3				
20	Skeleton 2 C "Largest Male"	P	L	RT	PM1		X		0.94, 2.22	3				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	Skeleton 2 C "Largest Male"	P	L	RT	C		X			4				
20	Skeleton 2 C "Largest Male"	P	L	RT	I2		X			5				
20	Skeleton 2 C "Largest Male"	P	L	RT	I1		X			5				
20	Skeleton 2 C "Largest Male"	P	L	LT	I1		X			5				
20	Skeleton 2 C "Largest Male"	P	L	LT	I2		X			5				
20	Skeleton 2 C "Largest Male"	P	L	LT	C		X			4				
20	Skeleton 2 C "Largest Male"	P	L	LT	PM1		X			4				
20	Skeleton 2 C "Largest Male"	P	L	LT	PM2		X			3				
20	Skeleton 2 C "Largest Male"	P	L	LT	M1		X				20			
20	Skeleton 2 C "Largest Male"	P	L	LT	M2		X				20			
20	Skeleton 2 C "Largest Male"	P	L	LT	M3		X				16			
20	Skeleton D "2nd Largest Male"	P	U	RT	M3		X		1.66		16		1	
20	Skeleton D "2nd Largest Male"	P	U	RT	M2		X		1.54		16			
20	Skeleton D "2nd Largest Male"	P	U	RT	M1		X		2.7		20			
20	Skeleton D "2nd Largest Male"	P	U	RT	PM2				2.19, 3.98		24			
20	Skeleton D "2nd Largest Male"	P	U	RT	PM1				1.14, 3.86		20			
20	Skeleton D "2nd Largest Male"	P	U	RT	C				1.81, 3.23, 5.84		20			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	Skeleton D "2nd Largest Male"	P	U	RT	I2				2.03, 4.50, 6.62		16			
20	Skeleton D "2nd Largest Male"	P	U	RT	I1				2.20, 3.46, 6.40		20			
20	Skeleton D "2nd Largest Male"	P	U	LT	I2				2.30, 4.20, 6.78		16			
20	Skeleton D "2nd Largest Male"	P	U	LT	C				2.25, 3.58, 6.39		16			
20	Skeleton D "2nd Largest Male"	P	U	LT	PM1				2.53, 4.67		16			
20	Skeleton D "2nd Largest Male"	P	U	LT	PM2				2.12, 3.70		20			
20	Skeleton D "2nd Largest Male"	P	U	LT	M1				2.08, 4.76		24			
20	Skeleton D "2nd Largest Male"	P	L	RT	M2		X		2.03		20			
20	Skeleton D "2nd Largest Male"	P	L	RT	M1		X		1.88		20			
20	Skeleton D "2nd Largest Male"	P	L	RT	PM1				1.78, 3.80	4				
20	Skeleton D "2nd Largest Male"	P	L	RT	C				2.07, 3.89, 6.34	3				
20	Skeleton D "2nd Largest Male"	P	L	LT	C				2.27, 4.15, 6.34	3				
20	Skeleton D "2nd Largest Male"	P	L	LT	PM2		X		2.04, 3.35	3				
20	Skeleton D "2nd Largest Male"	P	L	LT	M1		X		1.90, 2.96		24			
20	Skeleton D "2nd Largest Male"	P	L	LT	M2		X		2.24		20			
20	Skeleton E	P	U	RT	M3		X				4			
20	Skeleton E	P	U	RT	M2		X				4		1	
20	Skeleton E	P	U	RT	M1		X				4			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	Skeleton E	P	U	RT	PM2		X			2				
20	Skeleton E	P	U	RT	PM1		X			2				
20	Skeleton E	P	U	RT	C		X			2				
20	Skeleton E	P	U	RT	I2		X			2				
20	Skeleton E	P	U	LT	I1				2.50, 3.82	2				
20	Skeleton E	P	U	LT	I2					2				
20	Skeleton E	P	U	LT	C				1.73, 3.06	2				
20	Skeleton E	P	U	LT	PM1					2				
20	Skeleton E	P	U	LT	PM2					2				
20	Skeleton E	P	U	LT	M1		X				8			
20	Skeleton E	P	U	LT	M2						4			
20	Skeleton E	P	U	LT	M3						4			
20	Skeleton F	P	L	RT	M3						4		1	
20	Skeleton F	P	L	RT	M3						4			
20	Skeleton F	P	L	RT	PM2					3				
20	Skeleton F	P	L	RT	PM1				3.12	3				
20	Skeleton F	P	L	RT	C		X		2.40, 3.34, 6.43	2				
20	Skeleton F	P	L	RT	I2		X			3				
20	Skeleton F	P	L	RT	I1		X			4				
20	Skeleton F	P	L	LT	I1		X			3				
20	Skeleton F	P	L	LT	I2		X		3.31, 4.09	3				
20	Skeleton F	P	L	LT	C				2.58, 3.61, 6.74	3				
20	Skeleton F	P	L	LT	PM1		X			3				
20	Skeleton F	P	L	LT	PM2		X		1.26	3				
20	Skeleton F	P	L	LT	M2		X				8			
20	Skeleton F	P	L	LT	M3		X				8			
20	Skeleton 1 G "Woman with exostoses"	P	U	RT	M2		X			2			1	

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	Skeleton 1 G "Woman with exostoses"	P	U	RT	M1		X			3				
20	Skeleton 1 G "Woman with exostoses"	P	U	RT	PM1		X			4				
20	Skeleton 1 G "Woman with exostoses"	P	U	RT	I1					4				
20	Skeleton 1 G "Woman with exostoses"	P	U	LT	I2					2				
20	Skeleton 1 G "Woman with exostoses"	P	U	LT	C		X			2				
20	Skeleton 1 G "Woman with exostoses"	P	U	LT	PM1					3				
20	Skeleton 1 G "Woman with exostoses"	P	U	LT	M1						20			
20	Juvenile "A"	D	U	LT	M2			Carabelli's Cusp				6.5	1	
20	Juvenile "A"	D	U	LT	C							6.5		loose
20	Juvenile "A"	D	U	RT	C							6.5		loose
20	Juvenile "A"	D	U	RT	M1							6.5		
20	Juvenile "A"	D	U	RT	M2							6.5		
20	Juvenile "A"	D	L	LT	M2							6.5		
20	Juvenile "A"	D	L	LT	M1							6.5		
20	Juvenile "A"	D	L	RT	M1							6.5		
20	Juvenile "A"	D	L	RT	M2							6.5		
20	Juvenile "A"	P	U	RT	M2							6.5		

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
20	Juvenile "A"	P	U	RT	M1							6.5		
20	Juvenile "A"	P	U	RT	I1							6.5		Loose
20	Juvenile "A"	P	U	LT	I1				1=3.57; 2=5.75; 3=10.24			6.5		Loose
20	Juvenile "A"	P	U	LT	M1							6.5		
20	Juvenile "A"	P	L	RT	M1			Carabelli's Cusp				6.5		
20	Juvenile "A"	P	L	RT	I1							6.5		
20	Juvenile "A"	P	L	LT	I1							6.5		
20	Juvenile "A"	P	L	LT	M1							6.5		
25	1-9-71	P	L	RT	M1		X				4		1	
25	1-9-71	P	L	RT	PM2		X			2				
25	1-9-71	P	L	RT	PM1		X			2				
25	1-9-71	P	L	RT	C		X		3.98	2				
25	1-9-71	P	L	LT	PM2		X		2.06	3				
25	1-9-71	P	L	LT	M1	X	X		2.16		12			
25	1-9-71	P	L	LT	M2		X				8			
25	1-9-71	P	L	LT	M3		X				4			
25	1-9-71	P	L	RT	PM1		X			5				
25	1-9-71	P	L	RT	C		X			6				
25	1-9-71	P	L	RT	I2					8				
25	1-9-71	P	L	LT	I1					8				
25	1-9-71	P	L	LT	I2					8				
25	1-9-71	P	L	LT	C		X			7			1	
25	1-9-71	P	L	LT	PM1		X			5				
25	1-9-71	P	L	LT	PM2		X			5				
25	1-9-71	P	L	LT	M1						24			
25	1-9-71	P	L	LT	M2	X					16			
25	1-9-71	P	L	LT	M3	X					12			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
25	Skeleton 6 "Child 6 months"	D	L	RT	M2							10.5m		
25	Skeleton 6 "Child 6 months"	D	L	RT	M1							10.5m		
25	Skeleton 6 "Child 6 months"	D	L	RT	I2							10.5m		
25	Skeleton 6 "Child 6 months"	D	L	RT	I1							10.5m	1	
25	Skeleton 6 "Child 6 months"	D	L	LT	I1							10.5m		
25	Skeleton 6 "Child 6 months"	D	L	LT	I2							10.5m		
25	Skeleton 6 "Child 6 months"	D	L	LT	C							10.5m		
25	Skeleton 6 "Child 6 months"	D	L	LT	M1							10.5m		
25	Skeleton 6 "Child 6 months"	D	L	LT	M2							10.5m		
26	cranium 4	P	U	LT	PM1	X			1.71, 3.33, 4.50	2				
26	cranium 4	P	U	LT	PM2				2.11, 4.38	2				
26	cranium 4	P	U	LT	M1				1.73		12		1	
26	cranium 4	P	U	LT	M2				3.07		12			
26	cranium 4	P	U	LT	M3				2.12		12			
26	Cranium 1	P	U	RT	M3		X		2.84					
26	Cranium 1	P	U	RT	PM2				1.95					
26	Cranium 1	P	U	RT	PM1									
26	Cranium 1	P	U	RT	C				1.45					
26	Cranium 1	P	U	RT	I2								1	loose
26	Cranium 1	P	U	LT	M1	X	X							
26	Cranium 1	P	U	LT	M2				2.42					
26	Cranium 1	P	L	RT	M3						28			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
26	Cranium 1	P	L	RT	M2						16			
26	Cranium 1	P	L	RT	M1	X					16			
26	Cranium 1	P	L	RT	PM2					3				
26	Cranium 1	P	L	RT	PM1				1.61, 3.28	3				
26	Cranium 1	P	L	RT	C				2.85, 4.83	5				
26	Cranium 1	P	L	RT	I2				2.50, 3.94	3				
26	Cranium 1	P	L	RT	I1				2.00, 3.73	3				
26	Cranium 1	P	L	LT	I1	X				6				
26	Cranium 1	P	L	LT	C	X			2.06, 3.89, 6.20					
26	Cranium 1	P	L	LT	PM1	X			2.62	3				
26	Cranium 1	P	L	LT	PM2				1.81	3				
26	Cranium 1	P	L	LT	M1	X			2.74		16			
26	Cranium 2	P	U	RT	M3		X				0		1	
26	Cranium 2	P	U	RT	M2	X	X				16			
26	Cranium 2	P	U	RT	M1						16			
26	Cranium 2	P	U	RT	PM2					2				
26	Cranium 2	P	U	RT	C					3				
26	Cranium 2	P	U	RT	I2					2				
26	Cranium 2	P	U	RT	I1					2				
26	Cranium 2	P	U	LT	I1					2				
26	Cranium 2	P	U	LT	I2					3				
26	Cranium 2	P	U	LT	PM1		X			3				
26	Cranium 2	P	U	LT	PM2		X			2				
26	Cranium 2	P	U	LT	M1						16			
26	Cranium 2	P	U	LT	M2		X				12			
26	Cranium 2	P	L	RT	M2						12			
26	Cranium 2	P	L	RT	M1						16			
26	Cranium 2	P	L	RT	PM2					2				
26	Cranium 2	P	L	RT	PM1					3				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
26	Cranium 2	P	L	RT	C					5				
26	Cranium 2	P	L	RT	I2					7				
26	Cranium 2	P	L	RT	I1					8				
26	Cranium 2	P	L	LT	I2					6				
26	Cranium 2	P	L	LT	C					5				
26	Cranium 2	P	L	LT	PM1					3				
26	Cranium 2	P	L	LT	PM2					2				
26	Cranium 2	P	L	LT	M1		X				12			
26	Cranium 2	P	L	LT	M2		X				12			
26	Cranium 3	P	U	RT	M3	X			1.07		16		1	
26	Cranium 3	P	U	RT	M1				2.22		16			
26	Cranium 3	P	U	RT	C				3.33	3				
26	Cranium 3	P	U	RT	I2				3.31	3				
26	Cranium 3	P	U	RT	I1				3.36, 6.58	3				
26	Cranium 3	P	U	LT	C				3.46, 6.54	1				
26	Cranium 3	P	U	LT	M1				2.00, 3.39		16			
26	Cranium 3	P	U	LT	M2				2.98		12			
26	Cranium 3	P	U	LT	M3				1.79		12			
26	Cranium 3	P	L	RT	M3	X					8			
26	Cranium 3	P	L	RT	M2						8			
26	Cranium 3	P	L	RT	M1				3.13		8			
26	Cranium 3	P	L	LT	PM2				1.84	2				
26	Cranium 3	P	L	LT	M1				1.88		20			
26	Cranium 3	P	L	LT	M2	X					12			
26	Cranium 3	P	L	LT	M3						12			
26	Cranium 3	P	U	RT	PM1		X			2				
26	Cranium 3	P	U	RT	M2		X				4			
27	1-7-78	P	U	LT	I2				1.13, 2.72	5			1	

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
27	1-7-78	P	U	LT	C				2.02, 4.43	5				
27	1-7-78	P	U	LT	PM1				2.01, 3.66	3				
27	1-7-78	P	U	LT	PM2				1.07, 3.49	3				
27	1-7-78	P	U	LT	M1				3.4		20			
27	1-7-78	P	U	LT	M2				2.85		16			
27	1-7-78	P	L	RT	M3						8			
27	1-7-78	P	L	RT	M2	X					16			
27	1-7-78	P	L	RT	M1	X					20			
27	1-7-78	P	L	RT	PM2					1				
27	1-7-78	P	L	RT	PM1				2.75	1				
27	1-7-78	P	L	RT	C				1.38, 4.42	3				
27	1-7-78	P	L	LT	M2				3.34		20			
27	1-7-78	P	L	LT	M3	X			1.84		24			
27	1-7-78	P	L	RT	M3						20		1	
27	1-7-78	P	L	RT	M2	X					20			
27	1-7-78	P	L	RT	M1	X					20			
27	1-7-78	P	L	RT	I1		X			4				
27	1-7-78	P	L	LT	I1		X		4.32, 5.12	4				
27	1-7-78	P	L	LT	I2		X		3.82, 5.08	4				
27	1-7-78	P	L	LT	C		X		3.38, 5.58, 6.99	3				
27	1-7-78	P	L	LT	PM1				1.55, 3.91	3				
27	1-7-78	P	L	LT	PM2				2.28, 4.22	3				
27	1-7-78	P	L	LT	M1				1.88, 4.02		20			
27	1-7-78	P	L	LT	M2				2.26, 3.10		20			
27	1-7-78	P	L	LT	M3						20			
38	Skeleton A	P	L	RT	M3				2		8			
38	Skeleton A	P	L	RT	M2		X		2.1		8		1	
38	Skeleton A	P	L	RT	M1				1.43		8			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
38	Skeleton A	P	L	RT	PM2				1.96	3				
38	Skeleton A	P	L	RT	PM1				2.11, 4.78	3				
38	Skeleton A	P	L	RT	C				3.07, 6.33	3				
38	Skeleton E	P	U	LT	M1						28			
38	Skeleton E	P	U	LT	M2				2.81		24		1	
38	Skeleton E	P	U	LT	M3				2.69		20			
38	Skeleton F	P	U	RT	PM2					7				
38	Skeleton F	P	U	RT	PM1	X			3.57	6				
38	Skeleton F	P	U	RT	I2				1.75, 3.40	6				
38	Skeleton F	P	U	RT	I1				2.22, 3.37	4			1	
38	Skeleton F	P	U	LT	I1				1.96, 3.72	3				
38	Skeleton F	P	U	LT	C				1.03, 2.16	3				
38	Skeleton F	P	U	LT	PM2					5				
38	Skeleton F	P	U	LT	M1						16			
38	Skeleton F	P	U	LT	M2	X					16			
38	Skeleton D	P	L	RT	PM2				1.63	6			1	
38	Skeleton D	P	L	RT	PM1				2.53	6				
38	Skeleton D	P	L	RT	C				2.48, 3.45, 5.11	7				
38	Skeleton D	P	L	RT	I2		X		3	5				
38	Skeleton D	P	L	RT	I1		X		3.43	6				
38	Skeleton D	P	L	LT	I1		X			8				
38	Skeleton D	P	L	LT	I2		X			6				
38	Skeleton D	P	L	LT	C				2.84, 3.44, 5.11	5				
38	Skeleton D	P	L	LT	PM1				1.85, 3.01	5				
38	Skeleton D	P	L	LT	PM2				1.48, 2.70	6				
38	Skeleton D	P	L	LT	M1	X			1.86		36			
38	Skeleton D	P	L	LT	M2						28			
38	Skeleton D	P	L	LT	M3	X					24			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
38	Skeleton 1	P	L	RT	M3						16		1	loose
38	Skeleton 1	P	L	RT	M2						24			loose
38	Skeleton 1	P	L	RT	C				1.84, 2.66, 3.99	4				loose
38	Skeleton 1	P	L	LT	PM1				1.40, 2.58	4				loose
38	Skeleton 1	P	L	LT	PM2									
38	Skeleton 1	P	L	LT	M1					8				
38	Skeleton 1	P	L	LT	M2					6				
38	Skeleton 1	P	L	LT	M3					5				
38	Skeleton B	P	L	RT	M1						20		1	
38	Skeleton B	P	L	RT	PM2					3				
38	Skeleton B	P	L	RT	PM1	X				3				
38	Skeleton B	P	L	RT	C	X			2.79	4				
38	Skeleton B	P	L	RT	I2					3				
38	Skeleton H	P	U	RT	M1						8		1	
38	Skeleton H	P	U	RT	PM2					3				
38	Skeleton H	P	U	RT	PM1					3				
38	Skeleton C	P	L	LT	I1								1	
38	Skeleton C	P	L	LT	I2									
38	Skeleton C	P	L	LT	C									
38	Skeleton C	P	L	LT	PM1									
38	Skeleton C	P	L	LT	PM2									
38	Skeleton C	P	L	LT	M1	X					16			
38	Skeleton C	P	L	LT	M2	X					20			
38	Skeleton G	P	U	RT	M3						12		1	
38	Skeleton G	P	U	RT	M2						12			
38	Skeleton G	P	U	RT	M1		X				12			
38	Skeleton G	P	U	RT	PM2					3				
38	Skeleton G	P	U	RT	PM1					2				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
38	Skeleton G	P	U	RT	C					4				
40		P	U	RT	M3						4		1	
40		P	U	RT	M1						8			
40		P	U	RT	PM2					2				
40		P	U	RT	PM1					2				
40		P	U	RT	C				1.71, 3.30, 6.22	3				
40		P	U	RT	I2		X		2.75	3				
40		P	U	RT	I1		X		2.31, 4.80, 6.71	3				
40		P	U	LT	I2				3.28	2				
40		P	U	LT	C				3 LEH lines present but cannot measure	2				
40		P	U	LT	PM1				1.01, 2.56	3				
40		P	U	LT	PM2				1.78	2				
40		P	U	LT	M1									loose
40		P	L	RT	M1						8			
40		P	L	RT	PM2				2.22	2				
40		P	L	RT	PM1				2,36, 5.60	2				
40		P	L	RT	C				2.86, 4.63, 5.69, 7.19	3				
40		P	L	RT	I2					3				
40		P	L	RT	I1					4				
40		P	L	LT	C				2.86, 4.57	3				
40		P	L	LT	PM1					2				
41	Skull 1	P	U	RT	I2									loose
41	Skull 1	P	U	LT	PM1		X							loose
41	Skull 1	P	U	LT	PM2								1	
41	Skull 1	P	L	RT	M3		X							loose
41	Skull 1	P	L	RT	M2									loose

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
41	Skull 1	P	L	RT	M1		X				32			
41	Skull 1	P	L	RT	PM2		X			7				
41	Skull 1	P	L	RT	C		X			4				
43	1-12-34	P	U	LT	M3						12			
43	1-12-34	P	U	RT	M3								1	
43	1-12-34	P	U	RT	M2						20			
43	1-12-34	P	U	RT	M1		X				20			
43	1-12-34	P	U	RT	PM2					5				
43	1-12-34	P	U	RT	PM1					5				
43	1-12-34	P	U	RT	C		X			4				
43	1-12-34	P	U	RT	I2		X			3				
43	1-12-34	P	U	RT	I1		X			6				
43	1-12-34	P	U	LT	I1		X			6				
43	1-12-34	P	U	LT	I2		X			6				
43	1-12-34	P	U	LT	C		X			5				
43	1-12-34	P	U	LT	PM1					4				
43	1-12-34	P	U	LT	PM2					4				
43	1-12-34	P	U	LT	M1	X					20			
43	1-12-34	P	U	LT	M2						16			
46		P	L	RT	M3				2.6		12			
46		P	L	RT	M2				1.75		16			
46		P	L	RT	M1				2.02		16			
46		P	L	RT	PM2				3.29					loose
46		P	L	RT	PM1				1.60, 5.16	3			1	
46		P	L	RT	C				0.87, 3.24	4				
46		P	L	RT	I2				2.1	5				
46		P	L	RT	I1				2.1	6				
46		P	L	LT	I1				1.92, 2.43	6				

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
46		P	L	LT	I2				1.76, 3.29	5				
46		P	L	LT	C				1.64, 4.81	4				
46		P	L	LT	PM1					3				
46		P	L	LT	PM2				2.89	3				
46		P	L	LT	M1				1.98, 3.75		24			
46		P	L	LT	M2				1.09		24			
46		P	L	LT	M3						16			
PLG	Skeleton A "two mandibles joined"	D	L	RT	M2							7.5		
PLG	Skeleton A "two mandibles joined"	D	L	RT	M1							7.5	1	
PLG	Skeleton A "two mandibles joined"	P	L	RT	M1							7.5		
PLG	Object 3-4-22; 1-4-31	P	U	RT	I1								1	loose
PLG	Object 3-4-22; 1-4-31	P	L	RT	M3						16			
PLG	Object 3-4-22; 1-4-31	P	L	RT	M2						20			
PLG	Object 3-4-22; 1-4-31	P	L	RT	M1						32			
PLG	Object 3-4-22; 1-4-31	P	L	RT	PM2									loose
PLG	Object 3-4-22; 1-4-31	P	L	RT	PM1									loose
PLG	Object 3-4-22; 1-4-31	P	L	RT	C									loose
PLG	Object 3-4-22; 1-4-31	P	L	LT	I2									loose
PLG	Object 3-4-22; 1-4-31	P	L	LT	C									loose

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	Object 3-4-22; 1-4-31	P	L	LT	PM1									loose
PLG	Object 3-4-22; 1-4-31	P	L	LT	PM2					4				
PLG	Object 3-4-22; 1-4-31	P	L	LT	M1						24			
PLG	Object 3-4-22; 1-4-31	P	L	LT	M2						24			
PLG	Object 3-4-22; 1-4-31	P	L	LT	M3						16			
PLG	Jaw (with Skull)	P	U	RT	M3						8		1	
PLG	Jaw (with Skull)	P	U	RT	M2						12			
PLG	Jaw (with Skull)	P	U	RT	M1		X		2.97		16			
PLG	Jaw (with Skull)	P	U	RT	I2				3.72, 4.90	2				
PLG	Jaw (with Skull)	P	U	LT	PM1				0.77, 1.38	2				
PLG	Jaw (with Skull)	P	U	LT	PM2				1.41, 2.20	2				
PLG	Jaw (with Skull)	P	U	LT	M1				2.51	2				
PLG	Jaw (with Skull)	P	U	LT	M2				2.33	2				
PLG	individual 1	P	L	RT	M3						8		1	
PLG	individual 1	P	L	LT	M1						24			
PLG	individual 1	P	L	LT	M2						32			
PLG	1-04-28	P	U	RT	M2						20		1	
PLG	1-04-28	P	U	RT	M1	X					16			
PLG	1-04-28	P	U	RT	I2					3				
PLG	1-04-28	P	U	RT	I1				2.31, 4.75	5				
PLG	1-04-28	P	U	LT	I2				2.66, 4.97	4				
PLG	1-04-28	P	U	LT	C				2.50, 3.68	4				
PLG	1-04-28	P	U	LT	PM1				1.83	3				
PLG	1-04-28	P	U	LT	PM2				1.76	3				
PLG	1-04-28	P	U	LT	M2						16			

Grave	Context	P vs D	U vs L	LT vs RT	Type	Caries	Calculus	Non-Metric	LEH (mm)	Smith (1984)	Scott (1979)	LATD	MLNI	Notes
PLG	1-04-28	P	U	LT	M3						16			
Rectangular Water Feature		P	U	RT	M3				3.43		4			
Rectangular Water Feature		P	U	RT	M2				1 LEH but can't measure		16			
Rectangular Water Feature		P	U	RT	M1				2.26		24			
Rectangular Water Feature		P	U	RT	PM2				2.35	4				
Rectangular Water Feature		P	U	RT	PM1				1.76	4				
Rectangular Water Feature		P	U	RT	C				3.02	5				
Rectangular Water Feature		P	U	RT	I2				3.43	6				
Rectangular Water Feature		P	U	LT	I1				2.74	6				
Rectangular Water Feature		P	U	LT	I2				1.65, 2.39	6			1	
Rectangular Water Feature		P	U	LT	C				3.05	5				
Rectangular Water Feature		P	U	LT	PM1				2.39	5				
Rectangular Water Feature		P	U	LT	PM2				2.48	5				
Rectangular Water Feature		P	L	RT	M2	X			2.22		24			
Rectangular Water Feature		P	L	RT	PM2				2.03	4				
Rectangular Water Feature		P	L	RT	PM1				1.23, 2.81	5				
Rectangular Water Feature		P	L	RT	C					7				
Rectangular Water Feature		P	L	RT	I2					7				
Rectangular Water Feature		P	L	RT	I1				2.24	8				
Rectangular Water Feature		P	L	LT	I2				2.38	7				
Rectangular Water Feature		P	L	LT	C					6				
Rectangular Water Feature		P	L	LT	PM1				2.88	4				
Rectangular Water Feature		P	L	LT	PM2				2.2	4				
Rectangular Water Feature		P	L	LT	M1	X					20			
Rectangular Water Feature		P	L	LT	M2				2.46		20			

Table 2. Full inventory of *in situ* teeth associated with specific individuals. Individuals are boxed in red. Smith (1984) wear scores fall within 1-8, light to heavy. Scott (1979) wear score sums fall within 0-40, light to heavy. Under LATD, m=months. Under notes, "loose" identifies teeth that are associated with an individual but not *in situ* (teeth that have fallen out of the tooth socket). PLG=parking lot grave; P=permanent; D=deciduous; U=upper; L=lower; LT=left; RT=right; X=present; LATD=London Atlas of Tooth Development; MLNI=minimum likely number of individuals; LEH=linear enamel hypoplasia;

Tooth Type	Number of Teeth	Percent (%) of Teeth with Observable LEH
rc_1	1	0.3
$?C_1$	2	0.6
$?I_?$	1	0.3
$?PM_2$	1	0.3
$?M_3$	1	0.3
LC_1	28	8.6
LI_1	7	2.2
LI_2	8	2.5
LPM_1	10	3.1
LPM_2	12	3.7
LM_1	7	2.2
LM_2	4	1.2
LM_3	1	0.3
RC_1	31	9.6
$RI_?$	2	0.6
RI_1	5	1.5
RI_2	14	4.3
RPM_1	12	3.7

Tooth Type	**Number of Teeth**	**Percent (%) of Teeth with Observable LEH**
RPM_2	12	3.7
RM_1	4	1.2
RM_2	3	0.9
RM_3	2	0.6
LC^1	21	6.5
$LI^?$	2	0.6
LI^1	15	4.6
LI^2	9	2.8
LPM^1	13	4.0
LPM^2	6	1.9
$?PM^2$	3	0.9
$?M_?$	1	0.3
LM^1	7	2.2
LM^2	6	1.9
LM^3	3	0.9
RC^1	19	5.9
RI^1	16	4.9
RI^2	16	4.9
RPM^1	7	2.2

Tooth Type	Number of Teeth	Percent (%) of Teeth with Observable LEH
RPM^2	5	1.5
RM^1	3	0.9
RM^2	1	0.3
RM^3	3	0.9
TOTAL	**324**	100

Table 3. Number of teeth with linear enamel hypoplasia by tooth Type.