RESCUE EXCAVATIONS AT THE VILLAGE CEMETERY OF MUSTLA

HELENA KALDRE
Tartu Ülikool, Ajaloo ja arheoloogia instituut (University of Tartu, Institute of History and Archaeology), Lossi 3, 51003 Tartu, Estonia; helena.kaldre@ut.ee
ARVI HAAK
Tartu Linnamuuseum (Tartu City Museum), Narva mnt 23, 51009 Tartu, Estonia
MARTIN MALVE
Tartu Ülikool, Ajaloo ja arheoloogia instituut (University of Tartu, Institute of History and Archaeology), Lossi 3, 51003 Tartu, Estonia

INTRODUCTION

In the beginning of June 2010, human bones were found in the course of the renovation of pipelines and cables in the central part of the market town Mustla, Viljandi County (Tarvastu parish). Rescue excavations were necessary because of the reconstruction of the Viljandi–Rõngu road and the infrastructure (bus-stops, pathways, etc). The bones were found in the corner of Posti and Karja streets (Fig. 1).

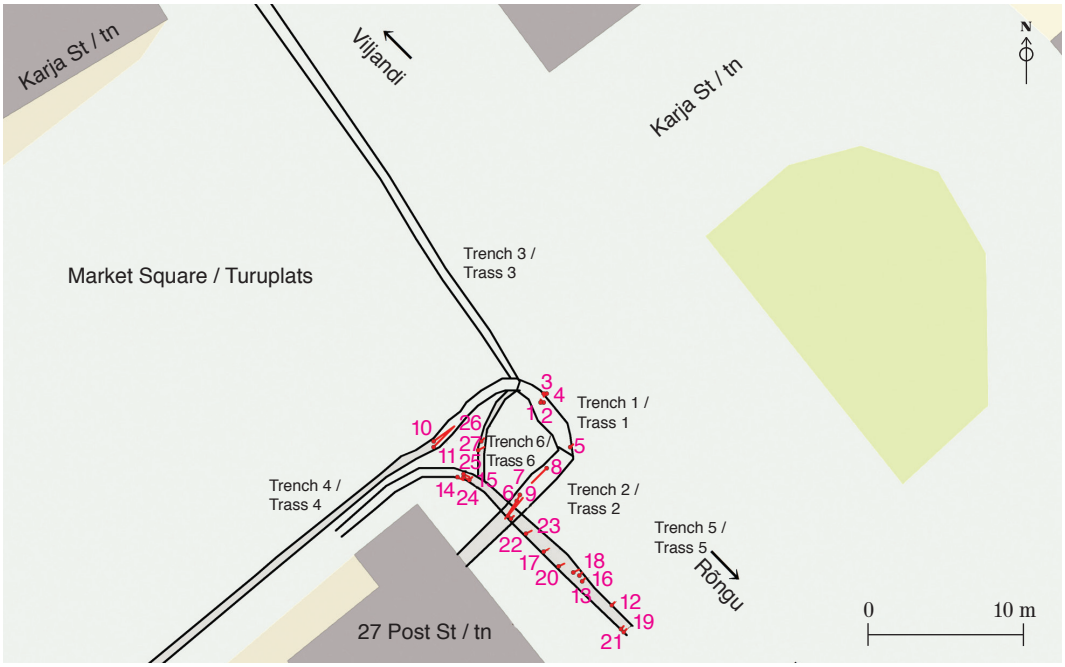

Fig. 1. Location plan of the village cemetery of Mustla.
Jn 1. Mustla külakalmistu asendiskeem.
Drawing / Joonis: Helena Kaldre

Representatives of the National Heritage Board inspected the site, collected the bones that were already removed from their initial location, and decided that archaeological monitoring and possibly also rescue excavations are needed during the successive work. The archaeological investigations were conducted by Helena Kaldre (TÜ) in June and the beginning of July and by Arvi Haak (TM) in August. Anthropologist Martin Malve (TÜ) carried out osteological investigations of the material collected.

The aim of the work was to fix the position of the bones already found and to determine their origin; to conduct supervision during the excavation of trenches for pipelines and cables; to provide necessary documentation in case burials were found; and to determine the period of usage and dimensions of the cemetery. Larger excavations were not planned in the initial phase of the fieldwork.

Investigations were interrupted by longer breaks and some unexpected fallbacks arose. The coordination of the schedules of archaeologists and road constructors presented some difficulties. The article looks into the results of the investigations, reflects on the problems experienced during fieldwork, and estimates the solutions reached.

Fig. 2. Burials nos 6, 7 and 8 in trench no. 2.
Jn 2. Matused 6, 7 ja 8 trassis nr 2.
Photo / Foto: Helena Kaldre

METHOD AND COURSE OF THE INVESTIGATIONS

During the first stage of fieldwork, the location of the first bones unearthed (Fig. 1) was investigated. More bones were found and four rather disturbed burials were distinguished. The bones that could not be definitely associated with *in situ* burials or were discovered from heaps of soil dug out from the trenches were collected.

Archaeological monitoring was conducted while the south-eastern part of the trench 1 and trenches 2–4 (Fig. 1) were dug with a mechanical excavator. As soon as burials began to appear, more careful digging was continued with shovels, trowels, and brushes. The burials were cleaned up, photographed, most of them fixed on drawings, measures taken (for geographical coordinates and absolute heights a GNSS receiver was used) and then picked up. The profiles of the trenches and piles of removed soil were additionally searched with a pinpointing metal detector (Garrett Pro-Pointer). The finds that could be obtained from the investigation are stored in the collections of the University of Tartu.[1]

[1] TÜ 1833: 1–12.

Fig. 3. Overview of the investigation area in August.
Jn 3. Ülevaade uurimisalast augustis.
Photo / Foto: Arvi Haak

The burials remained almost entirely in the 50–70 cm wide north-east – south-west oriented trenches (Fig. 2). Therefore the widening of the trenches was not necessary. There were also several bones that could not be associated with burials.

In early July work in the area of burials came to a halt, and was to be continued after several weeks. In early August, Arvi Haak, who continued with the monitoring project, discovered that due to serious misunderstanding, digging had continued also in the area where burials could be expected (Fig. 3). As a result, a large part of the electricity cable had already been placed through the cemetery area. Several burials had been disturbed and could only be recognised by bone assemblages in the trench or documented in the profiles. Thus the fieldwork consisted of registration of the disturbed burials, and opening of the remaining part of the trench under supervision. The burials discovered in the process were excavated, documented and collected for analysis and further storage.

THE CEMETERY AND ITS BACKGROUND

According to the investigation results, the object investigated can be classified as a village cemetery, generally dated to the 13th–18th century in Estonia (Valk 2001, 87–90). The cemetery was located south-east of the current market square in Mustla. Burials were detected in front of the house at Posti Street 27, in an area of *ca.* 20 × 10 m. Between

June and August 2010, in the investigated area of 27.2 m², 28 burials were determined; one of which remained *in situ* and was excluded from osteological overview; in addition, the disturbed bones collected during the fieldwork originate from 36 individuals. According to oral information from the locals human bones had also been found during the erection of an electricity utility pole in the corner of Posti and Karja streets next to the trench 1. Bones were also reportedly noticed while the pipelines were mounted in the yard of Posti Street 27. For that reason, the possibility that the cemetery area once extended south-west of the investigated area to the location where the Posti Street 27 is located seems rather likely. No burials were discovered in the trench no. 3 that was dug across the market square from the aforementioned utility pole and from the south-western part of the trench no. 4 (see Fig. 1). Thus, it seems that the north-western and western borders of the cemetery area were reached.

Earlier investigations at village cemeteries and rural churchyards of the southern Viljandi County have not been numerous (see Valk 2000 for a complete list of investigations). The only large-scale investigation took place at Kaubi in 1998, where 90 skeletons were detected in an area of 170 m² (Tvauri 1999). In the churchyard of Paistu, small-scale investigations took place in 2001 (Konsa 2002). Numerous grave finds from the Tarvastu churchyard, obtained during the reconstruction of the church, have reached museum collections without documentation (Valk 2006, 208).

The earlier history of the market town of Mustla has not been studied. The village is mentioned in the revision of 1599 (Viljandimaa II, 101). A 17th-century map displays fields and a few farms approximately in the area of current Mustla (EAA 308-2-216), but a settlement site has not been located so far. The current market town developed around a tavern from the end of the 19th century (Leetmaa & Araste 1936, 140). The medieval centre of the region was Tarvastu, where a castle of the Teutonic Order and a medieval parish church (only 1.8 km from the burial ground) are located.

THE BURIALS

In the area opened for placing the pipelines, the burials were rather close to one another. In places, two or even three burials were located upon each other. The density of burials increased towards the market place.

In June and July, altogether 11 burials and several clusters of disturbed bones were recognised. Some of the burials were fragmentary, but 9 of them could be investigated in more details.

The burials in trench 1 were probably partly disturbed already during the road construction and installation of electricity cables. There were no finds, but a green blotch on the mastoid process of the right temporal bone of the burial no. 2 might indicate a lost metal artefact. The upper part of the same burial seemed to be in its initial supine position with the head oriented towards the south. The position of the hands was hard to ascertain, since only both *humeri* were present. Two burials of children (nos 3 and 4) were found from the north-eastern profile of the trench. Burial no. 3 was located above burial no. 4, which might be the reason for the upper body of the former being significantly higher than its pelvis (Fig. 4). It remained uncertain whether the burials were contemporary.

The burials in the south-western part of the trench 2, appose to the house at Posti Street 27 were extremely disturbed and bones from at least 4–5 individuals

were compactly pushed together. Most likely it had happened already during the building of the house. Other four burials in trench no. 2 were more intact. Burials nos 6 and 7 (a man and a child) were situated closely together, so that a double burial is possible (see Fig. 3). A later wooden post was rammed above and between their thoracic, which had disturbed the respective parts of the burials. Their heads were oriented towards north-east and had fallen to their left side. The right hand of the adult was placed across his chest, with the palm positioned in the upper part of the thoracic, his left hand was above his pelvis. The legs of the adult were straight, intermeshed. A coin, probably connected with burial no. 6, was found from the north-western profile of the trench. It was a *schilling*, minted in Tallinn during the reign of the Swedish king Erik XIV in 1561–68 (Fig. 5: 3).[2]

Fig. 4. Burial no. 3.
Jn 4. Matus 3.
Photo / Foto: Helena Kaldre

Burial no. 9 was found beneath the burials 6 and 7, with the head oriented in an opposite direction (south-west). Only the right side of the burial was visible in the trench. His right hand was placed to his stomach area so that the palm of the hand was on his left side, his left hand was on his right pelvis.

In the north-eastern part of the trench, burial no. 8 (a woman) was investigated. The head was missing probably due to a later intrusion. According to the body position the female was oriented with the head in the north-east direction. She was buried with straight legs, her right hand was placed on her stomach area while her left hand was on the left pelvic bone, the palm being in the centre line of the body. A penannular brooch with round flat ends (Fig. 5: 7) was found that could be associated with the burial, but the exact location could not be determined. The brooch can be dated from the late 15th until the 17th century (Valk 2001, 45–46).

A double-burial (burials nos 10 and 11, men) was found near the corner of the house at Posti Street 27, in trench 4 (Fig. 6). The burials were contemporary, both in prone position. The right side of burial no. 10 was above the left side of burial no. 11. It seems that they were not properly buried – the position of their legs allows speculating that they were thrown to the grave.

A coin of Erik XIV, minted in 1564[3] (Fig. 5: 2) was found in the southern profile of trench 4. It cannot be associated with a definite burial, although there were bones in the profile as well. A piece of (probably linen) cloth (Fig. 5: 4) was discovered with the coin.

[2] Identified by Mauri Kiudsoo (AI).
[3] Identified by Mauri Kiudsoo (AI).

Fig. 5. Items found from the cemetery. 1–3 – coins, 4 – textile fragment, 5 – finger ring, 6–7 – penannular brooches.
Jn 5. Kalmistult leitud esemed. 1–3 – mündid, 4 – tekstiilikatke, 5 – sõrmus, 6–7 – hoburaudsõled.
(TÜ 1833: 7, 8, 9, 8a, 2, 11, 10.)
Photo / Foto: Arvi Haak

Of the 17 burials identified in August, only four could be investigated in greater extent. Next to the proximal end of the right pelvis of burial no. 20, among the fingers, a spiral finger-ring with a twisted middle wind, probably of silver, was obtained (Fig. 5: 5). Such finger-rings are more common from the second half of the 15th until the 17th century (Valk 1991, 186). As the phalanges were collected while removing the *femur* from the profile, the exact position of the hands could not be determined.

Two burials of infants, nos 24 and 25 were thoroughly investigated. The later burial (no. 24) was in a supine position, with legs slightly raised. Its right hand was in a straight position, with fingers turned toward the pelvis, while the left hand was turned to the chest at an almost regular angle (Fig. 7). It had destroyed the head of the earlier burial (no. 25), as fragments of its skull were found in the grave filling of burial no. 24. Both hands of burial no. 25 were turned from the elbow towards the shoulders. Next to its left clavicle, a penannular brooch with knob-shaped ends was found (Fig. 5: 6). Such brooches were in use until the late 16th century, its diameter (3.5 cm) would allow to suggest its medieval rather than post-medieval origin (Valk 2001, 45–46).

Another coin of Erik XIV, minted in 1562[4] (Fig. 5: 1) was found from the grave filling of burial no. 17 next to its feet. It is not certain whether it is connected to the burial, as it was found *ca.* 15 cm above the bones.

Usually, the organics had not been preserved and no direct evidence of coffins was collected. However, a darker stratum determined below some burials, e.g. no. 20, where remains of wood could also be traced above the deceased, and a small fragment of an iron nail from the burial no. 25 might indicate that at least in some cases, coffins were used. A nail was also associated with burial no. 8. It should be mentioned that in these cases, the burial pits were easier to determine, as the filling differed

[4] Identified by Mauri Kiudsoo (AI).

distinguishably in the colour of the sand covering most of the area.

In the case of some of the burials, which could be distinguished only in profile, it was possible to follow a dark sooty layer above the human bones. In the case of burial no. 19, it was 7–16 cm above the bones, and consisted of dark sooty soil. In the case of burial no. 18, the sooty layer was also present, but was merely 1 cm thick. It probably originated from organic matter in the grave filling.

The situation with the grave orientation is rather complicated. As most of the burials detected in August were only partially visible in the trench, it is only possible to state that they were buried with their heads in the western directions. Of the burials whose orientation could be seen more precisely, four were buried with their head towards the north-east, two towards north-west, one towards west, four towards south-west and one towards south. So, in addition to the general western orientation (west, south-west and north-west), a significant group was buried with the north-east orientation, and one burial was south orientated.

OSTEOLOGICAL MATERIAL

During archaeological monitoring, 28 burials that were at least partially intact could be identified. All but one that was left intact could be analysed (Table 1). Five burials (nos 6, 8, 9, 10, 11) could be studied to their full extent, and 22 partially. Among the burials found *in situ*, six were male, six female and 13 sub-adults. In addition, one of the burials could be a woman, suggested by the small size and gracility of the bones and the other was another adult. Due to the fragmentation of the collected bones, definitive determination was not possible. A large amount of disturbed human bones had

Fig. 6. Burials nos 10 and 11.
Jn 6. Matused 10 ja 11.
Photo / Foto: Helena Kaldre

Fig. 7. Burial no. 24.
Jn 7. Matus 24.
Photo / Foto: Arvi Haak

also been collected during the investigations. There were at least 36 individuals: 8 male, 2 female, 1 adolescent, 4 infants, 17 juveniles and 4 adults whose sex could not be determined due to fragmentation of the material. Six of the most fragmentary burials and the disturbed bones were reburied to the cemetery of Tarvastu. 21 more complete burials will be preserved in the osteological collection of the University of Tartu for further study.

The sex of the adults was determined according to markers on pelvis and cranium (Buikstra & Ubelaker 1994, 16–20). In case these were missing, the length of the long bones was used for that purpose, namely that of *humerus, femur,* and *tibia* (Garmus & Jankauskas 1993, 6–8). The age of the adults was determined according to symphysial face surface of the *pubis* (White & Folkens 2005, 374–379), tooth attrition (Brothwell 1965, 69), cranial suture closure (Buikstra & Ubelaker 1994, 32–38), and age-related morphological changes on joint surfaces (Data collection codebook 2005, 31–33).

The sex of the sub-adults was not determined, as sexual markers are fully developed only by the end of puberty. The age of the infants and juveniles was determined according to epiphyseal union (Recommendations 1980), tooth eruption and development (Ubelaker 1989, 63–65), and the length of the long bones (Allmäe 1998, 183).

In the case of the Mustla village cemetery the number of sub-adults buried was greater than that of adults. The greater proportion of sub-adult burials has been also stressed in the case of osteological material from urban cemeteries (Kalling 1995; 1997), and in the case of the village cemetery of Kaubi[5] (Tvauri 1999, 135–136). However, the material is too scarce for definite conclusions.

[5] Human osteological material from the village cemetery of Kaubi was analysed by anthropologist Ken Kalling (Tvauri 1998, 5–27).

From the palaeopathological viewpoint, several diseases and traumas were identified (see Table 1), which were determined according to Ortner and Putschar (1985) and Steinbock (1976). Among the disturbed bones, a male cranium (age at death 30–40 years) could be pointed out. Traces of a healed trauma could be distinguished on his cranium vault, above the sagittal suture connecting the parietal bones (Fig. 8). Such hollow-shaped cranial fractures are usually caused by blunt force traumas. In the case of the man buried at Mustla, parts of the neurocranium had been forced inwards, but the trauma had not been lethal and the person had healed from it. This can be seen from the round edges of the wound. In the case of two skeletons, healed fractures of bones could be distinguished.

Fig. 8 Male cranium with healed depressed trauma.
Jn 8. Paranenud lohukujuline trauma mehe koljul.
Photo / Foto: Martin Malve

DISCUSSION

The burial ground was found during road construction and the hurriedly necessitated investigations involved monitoring the digging of the pipeline trenches and some excavations where necessary within the trenches. While this method worked reasonably during the trenches directed from east to west, it turned out to be unsuitable for the trench running crosswise to the direction of the burials.

The cemetery yielded a considerable number (35 out of 63) of infant or juvenile burials, including those under the age of two. In such a case, it turned out that monitoring of a narrow sandy trench, the profiles of which were always likely to crumble, was not a suitable method even in the situation of hurried rescue investigations.

The question remains whether a larger area should have been opened during the investigations, especially in the north-western part of the area, where the concentration of burials was rather high, including numerous child burials. It would definitely have been a better option in the second phase of the investigations, when trenches were situated crosswise to the orientation of the burials. However, the best option would have been reorganising the location of the cables and trenches so that these would not cross the central part of the cemetery area.

If digging trenches in a cemetery area is unavoidable, it is commonly practised to remove soil with mechanisms until the level of the uppermost burials is reached. In the case of Mustla, less digging with excavator would have resulted in a greater number of burials distinguished *in situ*, especially child burials. Many burials were undoubtedly disturbed during later burials and the construction of the infrastructure in the area, but it is probable that some of the infant burials in trenches 2 and 4 were destroyed because of the chosen unsuitable methodology. In addition, engaging an anthropologist already during the

fieldwork would also have been essential. It would have helped to prevent collecting some of the loose bones separately, that were later complicated to associate with particular burials. Perhaps a more effectual strategy for investigation would have included possibilities for a change of the methodology: when it became clear that areas with a higher concentration of burials have been reached, or that the burials are situated crosswise to the planned narrow trench, excavation areas exceeding the planned trenches could have been determined. A serious hindrance was insufficient communication with the contractor and its subcontractors, which resulted in parts of the trenches being opened without supervision.

The cemetery of Mustla belongs, in our opinion, to the group of village cemeteries, which are widespread in South Estonia (see Valk 2001). Arguments that support its longer usage than one particular event include the great number of burials, including a large share of child burials, and the great density of burials, so that in some cases later burials have partly destroyed earlier ones. It is hard to determine the first uses of the cemetery, as finds were rather rare and medieval burials might be without any grave goods. The burials with grave goods (nos 8, 20, 25) most likely originate from the second half of the 15th or 16th century.

The use of the cemetery during the period of the Livonian War is marked with 3 coin finds (Fig. 5: 1–3), which are dated to 1561–1568. Two of the coins were found from the profiles with a metal detector and were not specified to certain burials, while the third one originated from the fill of the grave of burial no. 17. Nevertheless it was visible from the profile that these were stratigraphically later than the earlier burials. On that ground, it is relatively difficult to determine both the beginning and the end of usage of the cemetery. However, the absence of clearly 17th century finds suggests that at least in the area investigated in 2010, burials had probably ceased already in the late 16th or in the first decades of the 17th century.

CONCLUSIONS

In 2010, a previously unknown cemetery was investigated at Mustla. It was discovered during reconstruction of the road and its scope had to be determined parallel to the road construction. It was established that there was a village cemetery at Mustla, but the exact time of its usage remained unclear. According to the finds the cemetery originates from the late medieval and early modern period, the burials probably stopped in the late 16th or early 17th century, but earlier burials without grave goods may extend the time range significantly. Anthropological investigation revealed a great number of child burials, and determined several diseases and traumas of the population.

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Table 1. Burials from the village cemetery of Mustla.
Tabel 1. Mustla külakalmistu matused.

Burial no. / Matuse nr	***Sex / Sugu***	***Age / Vanus***	***Pathologies / Patoloogiad***	***Notes / Märkused***
1	?	10 years ± 30 months		
2	Female	35–40 years	*Spondyloarthrosis, hypoplasia*, slight tooth stone, *parodonthosis*, abscess	
3	?	10 years ± 30 months		
4	?	8 years ± 24 months		
5	?	up to 10 years		Reburied
6	Male	45–50 years	*Spondyloarthrosis, spondylosis, spondylosis deformans,* Schmorl´s nodes, ante mortem tooth losses, medium tooth stone, abscesses	
7	?	4 years ± 12 months		
8	Female	40–45 years	Healed fracture of distal end of Ulna, healed fracture of left rib, *Spondylosis*	
9	Male	40–45 years	*Periostitis* of left Tibia, *spondyloarthrosis, Spondylosis, hypoplasia*, slight tooth stone, *parodonthosis*, abscess, caries	
10	Male	40–45 years	*Spondylosis, spondylosis deformans*, Schmorl´s nodes, *ante mortem* tooth losses, *hypoplasia*, abscesses, caries	
11	Male	45–50 years	*Spondylosis deformans, ante mortem* tooth losses, *hypoplasia*, medium tooth stone, *parodonthosis*, abscess	
12	Female	40 + years		
13	Male	25–40 years		
14	Male	45–50 years	*Spondylosis deformans*	
15	?	6 months ± 3 months		
16	?	7 years ± 24 months		
17	?	3 years ± 12 months		
18	?	adult		Reburied
19	Female	adult		Reburied
20	Female	40 + years	Healed fracture of distal end of left Tibia	
21	?	up to 14 years		Reburied
22	?	subadult (fragmentary)		Reburied
23	Female	40 + years	*Periostitis of the fibulae*	
24	?	18 months ± 6 months		
25	?	2 years ± 8 months		
26	?	0–4 (6) months		
27	Female?	40 + years		Reburied

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ARHEOLOOGILISED PÄÄSTEKAEVAMISED MUSTLA KÜLAKALMISTUL

Helena Kaldre, Arvi Haak ja Martin Malve

2010. a juunis leiti Viljandimaal Mustla alevikus (Tarvastu khk) tee-ehitusel inimluid. Leiukoht asub Mustlat läbiva Viljandi–Rõngu mnt ääres, Posti ja Karja tänava nurgal, keskväljakust/turuplatsist vahetult kagus (jn 1, 3). Edasise tee-ehituse ja taristu renoveerimistöö käigus toimusid arheoloogilised päästeuuringud, mida juunis ja juuli alguses juhatas Helena Kaldre (TÜ) ning augustis Arvi Haak (TLM). Leitud luude osteoloogilise analüüsi tegi Martin Malve (TÜ).

Tööde eesmärgiks oli jälgida trasside kaevamist ning talletada luustike asukoht ja leiukontekst. Samuti seati sihiks määrata kalmistu tüüp, vanus ning ulatus.

Uurimistöödel selgus, et tegemist on külakalmistuga, mida dateeritakse Eestis üldiselt 13.–18. sajandisse. Matuseid tuvastati Posti tn 27 maja ees u 20 × 10 m suurusel alal, millest läbi uuriti 27,2 m^2. Uuringutega määrati kalmistu lääne- ja loodepoolne piir (jn 1). Samas võib oletada, et kalmistu on varem ulatunud uurimisalast edela poole, Posti 27 maja alla, sest kohalike elanike sõnul oli maja hoovist torustike paigaldamise käigus leitud inimluid. Varasemad ehitustööd – maja ja teede ehitus ning elektripostide paigaldus – olid matuseid ka eelnevalt lõhkunud.

Uurimisalal tuvastati 28 tervet luustikku (üks neist jäi trasside alalt välja ning osteoloogilises analüüsis ei kajastu) ning segatud luude seas eristati 36 indiviidi. Maetud oli tihedalt, kohati üksteise peale 2–3 matust. Otseseid tõendeid kirstudest ei leitud, kuid nendele viitavad nt leitud naelad luustike 8 ja 25 juurest, samuti tumedam viirg mõne luustiku (nt 20) all ning puidujäänused, mida võis tuvastada mõnest matusest kõrgemal. Sellistel juhtudel oli matuseid kergem jälgida, kuna hauatäide erines nendest väljaspool olevast liivasest pinnasest.

Tööde esimeses etapis juunis-juulis eristatud 11 luustikust sai lähemalt uurida 9, mis olid terviklikumalt säilinud. Leiti kaksikmatus (luustikud 10 ja 11), kus kaks meest, vanuses 40–45 olid kas maetud kõhuli või hauda visatud (jn 6). Kaksikmatust võib oletada ka täiskasvanud mehe luustiku 6 ja lapse luustiku 7 puhul (jn 3). Leide oli vähe – plaatotstega hoburaudsõlg luustiku 8 juures (jn 5: 7), 1560. a-te münt, mis arvatavasti seostub luustikuga 6 (jn 5: 3), ja veel üks samaaegne münt koos tekstiilikatkega (jn 5: 2, 4) 4. trassi profiilist. Luustiku 2 paremal oimuluul oli rohekas, ilmselt metallesemest jäänud laik.

Augustis avastati kopaga varem avatud alalt ja järgnenud järelevalve käigus kokku 17 matust, millest nelja oli võimalik terviklikumalt uurida. Niipalju kui tervemate luustike ja säilinud osade põhjal otsustada võib, olid kõik surnud maetud seliliasendis. Panuseid oli võimalik seostada kolme luustikuga. Luustiku 20 vaagnaluu paremal küljel leiti koos sõrmeluudega ka tordeeritud keskkeermega spiraalsõrmus (jn 5: 5). Väikelapse (luustik 25) vasaku rangluu kohal asus nupp-otstega hoburaudsõlg (jn 5: 6). Veel ühe lapsematuse (luustik 17) hauatäitest, luudest 15 cm kõrgemalt leiti 16. saj münt (jn 5: 1). Viimase matuse puhul võis selgesti eristada ka hauasissekaevet.

Uuritud matustest oli 14 juhul võimalik määrata matmisorientatsiooni: neist neli olid suunatud peaga kirdesse, neli loodesse, üks läände, neli edelasse ja üks lõunasse.

Uurimisalal asunud 28 luustikust viis oli võimalik terviklikult üles võtta. Osteoloogilisel analüüsil selgus, et maetutest kuus olid mehed, kuus naised ja 13 lapsed. Kaht arvatavat täiskasvanuluustikku (millest üks võis kuuluda naisele) polnud kogutud luufragmentide vähesuse tõttu võimalik kindlamalt määrata. Segatud luuleidude seas võis eristada vähemalt 36 indiviidi: 8 meest, 2 naist, 1 nooruk, 4 imikut, 17 last ja 4 täiskasvanut, kelle sugu polnud luude fragmentaarsuse tõttu võimalik määrata. Kuus fragmentaarset luustikku ning segatud luud maeti Tarvastu kirikaeda, terviklikumaid luustikke säilitakse TÜ AK luuhoidlas edasisteks uuringuteks.

Matuste paleopatoloogilisel analüüsil leiti luustikelt mitmeid haigusi ja traumasid (vt Tabel 1). Eraldi väärib esiletoomist segatud luude seast leitud mehekoljul paiknenud lohukujuline koljumurd (jn 8), mis on paranenud. Arvatavasti põhjustas sellise vigastuse löök tömbi esemega. Märkimist väärib ka lastematuste suur osakaal.

Kuna Mustla külakalmistu avastati teetöödel ning varasem info matmispaigast puudus, tuli esmalt tuvastada luude täpne leiukoht ning alustada trassijärelevalvega. Juunis ja juulis leitud matused paiknesid trassi kulgemissuunas ning neid oli võimalik jooksvalt uurida. Tõsised probleemid tekkisid tööde katkemise järel, kui augustis selgus, et vahepeal oli suur osa elektritrassi

süvisest kaevatud läbi tihedalt täis maetud kalmistuala (jn 3), mistõttu mitmeid matuseid oli võimalik tagantjärgi tuvastada vaid trassiprofiilides. Lisaks paiknesid alal luustikud trassiga ristisuunas ning terviklikumalt sai uurida vaid väikelaste matuseid.

Mustla külakalmistu leiuaines pärineb 15. saj teisest poolest 16. saj lõpukümnendite või 17. saj alguseni. Eeltoodu ei välista, et kalmistule matmine algas märgatavalt varem, sest keskaegsed matused on sageli panusteta.