



# Town under siege: The Great Northern war mass graves from the suburb of Tartu

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## INTRODUCTION

During the reconstruction work of Oa Street in Tartu, a previously unknown burial ground with common graves was discovered. Archaeological rescue excavations recovered eight single burials, two double burials and four mass graves (Fig. 1). All mass graves had been partially destroyed by earlier construction, trenches for pipelines, etc., and as a result, numerous commingled human bones were found from all over the excavation area. The burial place was located at the town end of Oa street, approximately 200 metres from the medieval town wall. Several lead bullets, skeletons with unhealed firearm injuries and Eastern Orthodox crosses were recovered from the graves which all indicate that it was a burial site of the victims of some early modern conflict. Archaeological investigations only followed once skeletons had been unearthed, nevertheless the investigations gave an overview of the archaeological deposits. Although the burial site was the most surprising and noticed discovery, the excavations also revealed settlement traces prior to the burials, as well as strata connected to the formation of the Supilinn district, then still a suburb. The article summarises all the results of the excavations.

## BURIAL SITE

Of the four **mass graves** mentioned, **grave no. 1** was the most damaged by reconstruction works, thus only eight partially intact skeletons in the profile of the communication trench could be documented. Sixteen complete or partially preserved skeletons were unearthed from **mass grave no. 2** (Fig. 2). **Mass grave no. 3** was the largest and it contained partially preserved remains of 44 individuals. In the first three mass graves, the dead were interred haphazardly in a single hole, on top of each other in several layers, on their side or in a prone



**Fig. 1.** Map of the excavation plot. 1–4 – mass graves.

**Jn 1.** Välitööde ala kaart. 1–4 – ühishauad.

Drawing / Joonis: Monika Reppo



**Fig. 2.** Probable Russian soldiers in mass grave no. 2.

**Jn 2.** Arvatavad Vene sõdurid ühishausas 2.

Photo / Foto: Martin Malve

or crouched position, oriented towards different cardinal points. The unnatural positions of the arms and legs serve as evidence that the bodies had been thrown into the grave, as the arms were mostly positioned over the head and the legs were crossed over other individuals. In comparison to other graves, **mass grave no. 4** was well-organised – the deceased had been placed in a single row, on top of each other (Fig. 3). The excavations revealed ten skeletons, the majority of which were in an extended supine position and two in a prone position.

In addition to the mass graves, eight single burials were found, in which the dead were laid to rest in an extended supine position and oriented towards different cardinal directions. Two double burials with four individuals were found. The dead were placed in an extended supine position; in one case right next to one another, in the second one, on top of each other.

A total of 30 artefacts were recovered from mass graves nos 2 and 3. Eight Eastern Orthodox cross pendants dating back to the 17th–18th century (Fig. 4: 1–4) were found around the neck



**Fig. 3.** In mass grave no. 4, the dead were buried in a single row and in two layers.

**Jn 3.** Ühishauas 4 olid surnud sängitatud ühes reas kahes kihis.

Photo / Foto: Martin Malve



**Fig. 4.** A selection of finds from mass graves no. 2 and no. 3: 1–4 – Eastern Orthodox pendant crosses, 5 – heart-shaped brooch, 6 – gunflint, 7–10 – musket balls of lead, 11–12 – small field cannon balls made of cast iron.

**Jn 4.** Valik ühishaudadest 2 ja 3 pärinevaid leide: 1–4 – õigeusu kaelaristid, 5 – krooniga südasõlg, 6 – püssiluku tulekivi, 7–10 – pliiest püssikuulid, 11–12 – väikese välikahuri malmist kuulid.

(TM A 283: 13, 14, 18, 82, 112, 88, 81, 95, 101, 103, 106, 107.)

Photo / Foto: Arvi Haak

area of the individuals from mass grave no. 2, indicating that the grave was most likely used to bury the soldiers of the Tsardom of Russia. Three buttons were also collected from the same grave. A heart-shaped brooch with a crown (Fig. 4: 5), a possible pouch containing five gunflints (one of these – Fig. 4: 6) and two Swedish copper coins (1/6 öre) minted in 1666 were discovered from mass grave no. 3. One individual had a Russian Orthodox cross pendant. A few clothing accessories, an iron buckle, two buttons, two hooks and an eye clothing fastener were also collected from the same grave. The above-mentioned brooch is characteristic to findings from local churchyards (especially from rural cemeteries), but the cross pendant suggests that this communal grave probably contained both sides – the skeletons of soldiers of local origin as well as Russian soldiers.

A total of 12 lead bullets (selection on Fig. 4: 7–10), several of which were flattened by the collision with the body and bones, were collected as well as three small field cannon balls made of cast iron (Fig. 4: 11–12 and TM A 283: 105). Musket bullets and cannonballs were collected both from inside the skeletons and from the bottom of the grave where they had fallen after the bodies had decomposed.



**Fig. 5.** Adult femur with a gunshot wound.  
**Jn 5.** Püssikuulihaavaga täiskasvanu reieluu.  
 Photo / Foto: Janika Viljat



**Fig. 6.** Left side of the frontal bone of an adult male, hit with a small field cannonball.  
**Jn 6.** Väikese välikahurikuuli tabamusega täiskasvanud mehe kolju otsmikuluu vasak pool.  
 Photo / Foto: Janika Viljat

### Human remains

All the unearthed skeletons belonged to males and the majority were aged between 17–25 years at the time of death, with few exceptions of adolescent or older individuals. Only fatal injuries were found on the skeletons, which shows that all individuals buried here died instantly on the battlefield or soon after.

Preliminary analyses show no injuries related to close combat (e.g. blade injuries). Most of those killed had bullet wounds (Fig. 5), for example one male individual had been shot with as many as three lead bullets and a smaller field cannon ball (Fig. 6). Similar traumas were also found from the crania, thoraxes and/or limb bones of numerous other skeletons. Several lead bullets were found inside skulls and larger long bones. On impact with the long bones and ribs, the bullets had often shattered the bone into pieces. In multiple cases, the impact had torn off half of the head. In most cases, the bullets had passed through the body. The abundance of gunshot wounds on the skeletons clearly indicates that the men were killed from a distance.

## THE SETTLEMENT

The earliest deposit investigated in the area was manure-rich and it appeared approximately at the height 33.00 m a.s.l, which remained below groundwater level during the investigations. It was investigated in a relatively limited area, as it usually remained below the depth needed for placing the pipelines. Based on the few collected finds (fragments of local pottery, stave dishes and leather shoes), the deposit can be dated from the late 13th to the 15th/16th century, and is certainly of medieval origin. It could not be established whether it had formed in the area or resulted from waste removal from the walled town.

The chronologically following dark layer contained bricks, nails, charcoal, numerous fragments of pottery, animal bones, but was rather poor in organic matter. It could be traced over a large part of the investigated area. The main finds – mostly Northwest Russian style wheel-thrown pottery (Fig. 7: 1–3; Type 5 according to Tvauri 2000) and glazed redware (Fig. 7: 4–6), allow dating it to the second half of the 16th and 17th century. This is also supported by the coin finds: a penny of John III of Sweden, minted in Tallinn, a ½ grosz coin of Sigismund II Augustus of Poland-Lithuania, minted in Vilnius in 1565, and a penny of Charles XI, minted in Riga in 1664.<sup>1</sup> It was this layer the mass graves were dug into.

The stratigraphically and chronologically later strata, which were mostly brown in colour, can be connected with the formation of the suburb from the mid-18th century onwards. The characteristic finds from these strata included slipware, transferwares, porcelain from the Kuznetsov factories, as well as fragments of stoneware bottles for mineral water, but also those of ceramic sewers and flower pots. According to the finds, the accumulation lasted until the early 20th century.



**Fig. 7.** Ceramic finds related to the dark layer. 1–3 – rim fragments of Northwest Russian style greyware vessels (Type 5), 4–6 – fragments of redware vessels, incl. a tripod pot.

**Jn 7.** *Tumeda kihiga seonduvad keraamikaleiud. 1–3 – loodevenepärase keraamika servakatked (5. rühm), 4–6 – punaste savinõude, sh graapeni katked.*

(*TM A 283: 115, 22, 599, 289, 69, 642.*)

*Photo / Foto: Arvi Haak*

<sup>1</sup> TM A 283: 206–208. Identified by Andres Tvauri (TÜ).

## Faunal remains

During the fieldwork, 5867 animal remains (usually larger fragments) were manually collected. Most of the remains were from mammals (93%), but also birds (4%), fish (1%), amphibians (0.1%), bivalves (1%), gastropods (0.5%) and insects (0.2%) are present (Table 1). In addition, ten soil samples (ca. 10 L each) were collected and wet-sieved in the laboratory

**Table 1.** Distribution of faunal remains collected manually from Oa street in Tartu.

**Tabel 1.** Tartu Oa tänava käsitsi kogutud loomaluude liigiline jaotus.

NISP – number of identified specimens / määratud luuleidude koguarv.

Compiled by / Koostanud: Freydis Ehrlich, Lembi Lõugas

Group / Rühm	Taxon / Takson		NISP	%
Mammals	<i>Bos taurus</i>	Cattle	2302	39.2
	<i>Ovis aries</i>	Sheep	66	1.1
	<i>Capra hircus</i>	Goat	31	0.5
	<i>Ovis aries / Capra hircus</i>	Sheep / Goat	352	6.0
	<i>Sus domesticus</i>	Pig	320	5.5
	<i>Equus caballus</i>	Horse	73	1.2
	Artiodactyla	Even-toed animals	461	7.9
	Ungulata	Hoofed animals	54	0.9
	<i>Canis familiaris</i>	Dog	3	0.05
	<i>Felis catus</i>	Cat	13	0.2
	Carnivora	Carnivores	1	0.02
	<i>Lepus</i> sp.	Hare	11	0.2
	Mammalia	Mammals	1782	30.4
	Birds	<i>Anser / Branta</i>	Goose	56
Anatinae		Ducks	6	0.1
<i>Gallus gallus domesticus</i>		Domestic chicken	70	1.2
<i>Meleagris gallopavo</i>		Turkey	4	0.1
<i>Tetrastes bonasia</i>		Hazel grouse	4	0.1
<i>Tetrao urogallus</i>		Western capercaillie	4	0.1
<i>Lyrurus tetrix</i>		Black grouse	5	0.1
<i>Lyrurus tetrix / Tetrao urogallus</i>		Black grouse / Western capercaillie	2	0.03
<i>Perdix perdix</i>		Grey partridge	1	0.02
Galliformes		Galliforms	38	0.6
Aves		Birds	52	0.9
Fish		<i>Acipenser</i> sp.	Sturgeon	1
	<i>Abramis brama</i>	Common bream	1	0.02
	Cyprinidae	Cyprinidae	12	0.2
	<i>Esox lucius</i>	Pike	16	0.3
	<i>Gadus morhua</i>	Cod	3	0.02
	<i>Perca fluviatilis</i>	Perch	10	0.2
	<i>Sander lucioperca</i>	Pikeperch	1	0.02
	Pisces	Fish	21	0.4
Amphibians	Anura	Frogs	2	0.03
Vertebrates	Vertebrata	Vertebrates	7	0.1
Bivalves	Bivalvia	Bivalves	3	0.1
	<i>Ostrea edulis</i>	Flat oyster	40	0.7
	<i>Unio</i> sp.	River mussel	1	0.02
Gastropoda	Gastropoda	Gastropods	30	0.5
Insects	Insecta	Insects	9	0.15
<b>Total</b>			<b>5867</b>	<b>100</b>

using double sieve (with the mesh of 5 mm and 2 mm) in order to obtain small and very small bones of fish, birds and micromammals. Detailed information about methods, identifications and analyses are presented in the zooarchaeological report (Ehrlich & Lõugas 2022).<sup>2</sup> The material was divided into three analytical assemblages by the find contexts.

The first assemblage, the medieval manure-rich layer (late 13th to the 15th/16th century) contained 336 faunal remains. The bones belonged mostly to cattle, while a few sheep, goat, pig, cat, dog, horse, canidae, artiodactyls and ungulates were found. Of all the mammal bones, 22% remained unidentified. Among bird bones, domestic chicken, goose and unidentified bird were represented.

Fish were very rare in the manure-rich layer, both in manually collected assemblage and the wet-sieved sample (see below). In the manually collected assemblage, one dental bone of the medium sized pike and a posterior fragment of a cleithral bone of a large sized cod were found. The cleithrum fragment represents the part which often stays in the trunk after the decapitation of fish, thus indicating the dried cod was imported to Tartu.

The second assemblage, the dark layer (second half of 16th century to 17th century), consisted of 5225 faunal remains. Bones of cattle were the most abundant, followed by sheep and/or goat, pig and artiodactyls (most probably cattle, sheep, goats, and pigs). Additionally, the horse and ungulates (probably cattle or horse) were found, a large amount of horse bones originate from one individual. The dog was represented by only one femur, which had a cut mark on diaphysis (Fig. 8: 1–2). The cut marks may indicate consuming the individual for meat (e.g. Murphy 2001, 21), but are rare in the area, previously reported from Rakvere



**Fig. 8.** A selection of significant faunal remains. 1–2 – dog femur with cut marks, 3–4 chicken tibiotarsus with avian osteopetrosis, 5 – worked goose tibiotarsus.

**Jn 8.** Valik tähelepanuväärseid looma- ja linnuluid. 1–2 – löikejälgedega koera reieluu, 3–4 – osteopetroosiseiga kana sääre-kannaluu, 5 – töödeldud hane sääre-kannaluu.

(TM A 283/AZ-01:003, AZ-08:006, AZ-07:349.)

Photo / Foto: Triinu Borga

<sup>2</sup> The faunal remains were recorded in the ARHIS database after Lõugas (2018). Open access data will be available online in the ARHEST database. The zooarchaeological material is stored at the University of Tartu (collection ID: TM A 283).

(Malve *et al.* 2020). Of wild specimens, hare and frog bones were found, the last are probably not related to human activities. About 30% of mammal bones remained unidentified. Among bird bones, domestic chicken, goose, duck, black grouse, western capercaillie, hazel grouse, grey partridge, turkey, and unidentified galliforms were found. Additionally, 23% of bird bones remained unidentified. Turkey bones are one of the earliest finds in Estonia (Ehrlich 2022, 46–47). A pathological chicken tibiotarsal bone with avian osteopetrosis (Fig. 8: 3–4) and another with a possible case of rickets indicated by curved diaphysis (e.g. Gál 2008) were present. One goose tibiotarsal bone has been cut through on both ends and the diaphysis of the bone is worked (Fig. 8: 5), but probably unfinished. Such bones have been used for making music instruments, awls or points (Gál 2005).

From the 63 manually collected fishbones 49 came from the dark layer. Most of the fish were freshwater fish like the pike, perch, pikeperch and some cyprinid fish (certainly the bream, but based on the wet-sieved sample, definitely more taxa of this group were present). Marine fish were also found: the sturgeon and cod, which should be considered as imports in Tartu. Shellfish – the oysters, which together with fragments constitute the NISP of 18, were certainly imported, otherwise only two of them were complete (Lõugas *et al.* 2022). The freshwater mussels (incl. river mussels), which were also found, could have been coming from the local water bodies.

The third most abundant assemblage was the brown layer (mid-18th century to early 20th century). The cattle were the most commonly represented mammal also here. Additionally, sheep or goat, pig, horse, artiodactyls, ungulates, and a dog were found. Of wild mammals, juvenile hare tibia with cut marks were present. Of all mammal bones, 26% remained unidentified. Additionally domestic chicken, unidentified galliforms, goose and duck were found, as well as gastropods.



**Fig. 9.** A right valve of the oyster. Small holes, caused by the epibiont activity, are visible on the shell.

**Jn 9.** *Austri parem karbipool.* Karbil on näha epibiontide tegevusest põhjustatud augukesed.

(TM A 283/AZ-21:077.)

Photo / Foto: Lembi Lõugas

Only a single dental bone of a pike of medium size and one fragment of an unidentified fish were found from the brown layer. However, oyster shells were well represented in this assemblage. Here, the right valves, which are usually removed before serving them on the table, dominate (Fig. 9). The only left valve found within this assemblage was quite large in size and it has been affected by the epibiont activity and therefore looks like worm-eaten. Two other types of bivalves could not be identified more precisely.

Wet sieving produced a huge amount of different micro-finds, consisting of fish, bird, micro-/mammal and amphibian (frogs) bones and macrofossil remains (mostly seeds of different plant species). The dark layer was the richest in bone finds, while the soil sample from the manure-rich layer was almost empty of any bone. In all the wet-sieved assemblages, fish scales and scale fragments predominated. There, only two groups of fish

– Percidae and Cyprinidae – were identified. Sieving with 2 mm mesh gave a lot of small vertebrae of fish, which were identified mainly as small sized perch and some small cyprinids. From the cyprinids, the dace (*Leuciscus leuciscus*) and roach (*Rutilus rutilus*) are recognised by the pharyngeal teeth. Among the small vertebrae, a representative of genus *Coregonus* (whitefish) was found, but whether the *C. albula* or *C. lavaretus* occurred, is not easy to determine. A couple of herring (*Clupea harengus*) precaudal vertebrae were also found. Most probably they originate from the smaller Baltic herring rather than the Atlantic ones and are definitely interpreted as imports in Tartu. The same applies to the flounder (*Platichthys flesus*). There, also a small sized pike was discovered. The burbot (*Lota lota*) and the ruff (*Gymnocephalus cernuus*) could also be recognized in the sieved assemblages. However, the micromammals and amphibians are not identified so far, nor the rich collection of freshwater and terrestrial gastropods and bivalves.

### Floral remains

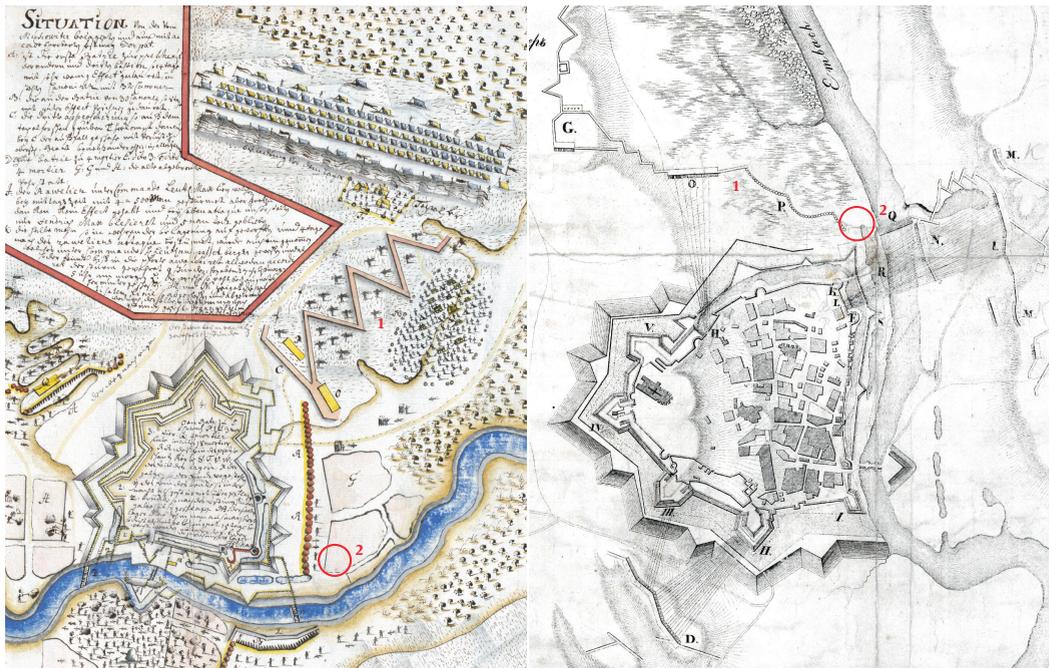
Plant macro-remains were collected from the fractions that remained on the 2 and 5 mm mesh after wet-sieving of 10 L soil samples. Also, smaller sub-samples (ca. 500 ml) were taken from the larger before the wet-sieving. This is because the 2 mm mesh is still too sparse for some of the plant seeds and it allows a more detailed determination. The sub-samples were soaked in 10% KOH solution for one day, after which they were washed on the sieves with mesh sizes of 1.6 mm, 0.8 mm and 0.4 mm. Fractions remaining on the sieves were collected for further identifications. The analysis is still in progress and only the results of larger fractions are available for now.

The richest part of plant macro-remains originated from the dark layer. All most common cereals of our region were found – barley (*Hordeum vulgare*), oat (*Avena sativa*), wheat (*Triticum aestivum*) and rye (*Secale cereale*). From the cereals, rye was most numerous. Hemp (*Cannabis sativa*) and hop (*Humulus lupulus*) were also found. Hops could have been used in brewing, but this plant also grows naturally on river banks. Among wild plants, raspberry (*Rubus idaeus*), wild strawberry (*Fragaria vesca*) and fragments of hazel (*Corylus avellana*) nut shells occurred in the material. The rest of the taxa are a mixture of weeds and wetland flora. Such cereal field weeds like corn cockle (*Agrostemma githago*), cornflower (*Centaurea cyanus*), corn spurry (*Spergula arvensis*), common fumitory (*Fumaria officinalis*), field bindweed (*Fallopia convolvulus*) and others were found. Pale persicaria (*Polygonum lapathifolium*) and cleavers (*Galium aparine*) inhabit both fields and riverbanks. Among the ruderal plants henbane (*Hyoscyamus niger*) and greater celandine (*Chelidonium majus*) could have been used as medical herbs.

### DISCUSSION

The earliest deposits in the investigated area are certainly of medieval origin. While the finds and zooarchaeological material indicate human activities, the relatively low position of the area may indicate seasonal occupation or perhaps waste removal, an issue to be addressed in future studies. The area north of the medieval town is perhaps first indirectly mentioned in the protocols of the Tartu town council, as a new pasture is referred to, which is located somewhere in front of the Russian Gates. The area is certainly depicted<sup>3</sup> on a map from 1704 (Fig. 10) as a ‘burnt suburb’, which clearly indicates earlier settlement. The archaeological

<sup>3</sup> The authors thank historian Kalle Kroon and architect Mart Hiob for drawing attention to the map legend.



**Fig. 10.** Maps from the year 1704, depicting the siege of Tartu: 1 – the trench used by Russian troops during the charge, 2 – location of the mass graves.

**Jn 10.** 1704. aasta Tartu piiramist kujutavad kaardid: 1 – vene vägede jooksukraav, 2 – ühishaudade asukoht. *Map / Kaart:* SE.KrA.0425.11.064; RA, EAA.995.1.6843, page 1.

dating of the dark layer (from the 1550s to the mid-17th century) is in good accordance with this piece of information, the relative intensity of the deposit and short dating of the finds, combined with cartographic data support on-site formation of the deposit. In the zooarchaeological material from this deposit, the number of species was the largest, including bones of species rarely found, such as turkeys, and imports like sturgeon, dried cod and oysters. As the burials are clearly later than the dark layer, we can generally date the faunal and floral remains from this deposit to the period between ca. 1550 and 1704, although later disturbances cannot be completely ruled out.

The discovered burial ground is unique as it is the first and biggest battle grave from the long-lasting war that has been discovered from Estonia or from the neighbouring countries. The burials are clearly cut into the above-mentioned dark layer, thus pre-dating the former to the early 18th century. The men buried in the area probably died in June–July 1704 during the siege of Tartu, possibly even after a decisive charge, which took place quite close to the burial place and during which about 6000 Russian soldiers broke through the town wall (Piirimäe 2003, 36). Among the approximately 18000 Russian attackers, the losses were 3000–3400, while from the 4000 defenders (Swedish troops), the casualties were 1400–2000 (Piirimäe 2003, 36–38). During the last charge, 700–900 defenders and 2500 conquerors died (Piirimäe 2003, 38). After the successful siege, Tartu remained under the Tsardom of Russia until WW I.

The discovery of mass graves was exceptional, yet expected at the same time. For years, it has been speculated where all those thousands of individuals who died as the result of

wars, famines and epidemics in the 16th–18th centuries were buried. To date only a few mass graves have been discovered from the churchyards or from the areas surrounding them located inside the town's wall.

For example, a triple grave of those who probably died in 1704 was unearthed from St Mary's churchyard (Malve 2017, 291–292). To date, the above-mentioned remains of a young man with a bullet inside the abdominal area were the only ones found from Estonia that could be directly linked to warfare during the Great Northern War. In addition, three Russian dragoons who died of the plague in 1710 were found in Lehmja-Pildiküla (Kriiska 1991) and one fully armed Russian soldier who died of a disease was also found from the Tallinn plague cemetery (Malve & Tvauri, this volume). The written sources regarding Tartu mention that people who died as the result of epidemics or warfare were buried outside the town (Laidre 2008).

The graves were near the town end side of the place where the Russians' trenches were located. These trenches through which they penetrated into the immediate vicinity of the town fortifications, sheltered from bullets, were used during the charge. The section of the town defences between the Russian gates and the tower on the south-eastern corner of the town (current territory of the Botanical Gardens of the University of Tartu), were defended by the Põltsamaa battalion, made up of locals. Most of them were killed. It is possible that some of the skeletons recovered from mass grave no. 3 were from this group.

The irregular burial style witnessed in mass graves nos 1 to 3 is most likely due to the large number of people dying over a very short time period. The corpses were probably interred in a hurry because of rapid decomposition during hot summer months. All the mass graves were located around 1.4 m below modern-day ground level, but only approximately 40–50 cm below original ground level. The low burial depth was probably also due to the waterlogged natural soil, as even during the fieldwork the graves were quickly filled with groundwater.

Whether the individuals found from single and double graves were soldiers of higher rank is hard to decide, as there were no artefacts recovered from the burials which could confirm this. It is possible that the mass graves and single burials were not dug at the exact same time, but over a longer period.

It is not known who buried the dead. While mass grave no. 2 most likely contained only Russian soldiers and mass grave no. 3 those from both sides, it can be concluded that no distinction was made when burying soldiers of opposing sides, as the deceased had been thrown into the graves on both instances. Only in the cases of the single graves and mass grave no. 4, the bodies had been interred differently. However, the burial of the Russian soldiers in separate graves shows that the counterparties were definitely distinguished after the battle. It is not possible to say for sure whether the dead were buried already during the siege or after the town surrendered. Although, since the graves containing the remains of soldiers from the opposing sides were in close proximity to each other, the burial most likely took place only after the town surrendered.

Evidence for the establishment of the Supilinn suburb was not numerous. The stratigraphically later deposit included finds from the mid-18th century, while cartographic material (RA, EAA.995.1.6843, page 2) may suggest even earlier dating. As later deposits were largely destroyed before archaeologists were informed of the street reconstruction, the data may be insufficient for further conclusions on this topic.

## CONCLUSION

The Oa Street burial ground in Tartu is the first such large-scale discovery of those killed in the Great Northern War, not only in Estonia but in the entire Baltic region. The human osteological material recovered from the site gives an exceptional opportunity to study the injuries and traumas of soldiers who died in battle during the Great Northern War, moreover the skeletons also offer study material to learn more about the lifestyle, diet and health of these men before they fell in battle. It also appeared that the graves were dug into a settlement site, which proves permanent habitation of the area from the mid-16th century. The collected finds, including animal remains, provide valuable information about the lifestyle of the inhabitants of Tartu. Besides local animal species, the discovery of turkey should be noted, but the diet of the residents also included imported seafood.

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- RA, EAA.995.1.6843, page 1.** Plan de Dorpat et du siege de cette ville par l'armee russe aux ordres du Marechal Cheremeteff, depuis le 10 Juin, jusqu'au 13 Juillet 1704. [1817]. (*Map in RA.*)
- RA, EAA.995.1.6843, page 2.** Дертптъ Съ ситуатцыею. (*Map in RA.*)
- SE.KrA.0425.11.064** Situation von dem Muscowitter belagerten und auch mit accordt Erroberten Festung Dorpat. (*Map in Krigsarkivet, the Military Archive of Sweden.*)
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## LINN PIIRAMISRÕNGAS: PÕHJASÕJA-AEGSED ÜHISHAUAD TARTU EESLINNAS

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Oa tänava rekonstrueerimisel Tartus avastati torustike ja kaablite paigaldamisel varem teadmata matmispaik. Arheoloogilistel päästekaevamistel leiti kaheksa üksikmatust, kaks kaksikmatust ja neli ühishauda (jn 1). Paraku olid kõik ühishauad varasemate ehitus- ja kaevetöödega osaliselt juba lõhutud. Kalmistu jääb Oa tänava linnapoolsesse otsa, u 200 m kaugusele keskaegsest linnamüürist. Skelettide ülesvõtmisel leiti hulk pliist püssikuule, õigeusu kaelariste ja parane-mata tulirelvavigastustega luid, mis viitavad üheselt mingi varauusaegse konfliktihvrite matmispaigale.

Ühishaud 1 oli varasemate kaevetöödega enim lõhutud, võimalik oli profiilis dokumenteerida vaid kaheksa lõhutud luustikku. Ühishauas 2 puhastati välja 16 terviklikult või osaliselt säilinud skeletti (jn 2). Ühishaud 3 oli uuritud haudadest suurim, seal avastati 44 osalist skeletti. Kolmes esimeses ühishauas olid surnud visatud ühte auku risti-rästi üksteise peale mitmes kihis: kõhuli, küllili ja kägaras asendis, pead paiknesid igasse ilmakaarde suunatuna. Ühishauas 4 olid kümme luustikku seevastu asetatud ühes rivis kahes kihis üksteise peale (jn 3). Sellesse ühishauda maetutest enamik olid selili-siruli asendis, vaid kaks asetseid kõhuli. Lisaks ühishaudadele avastati kaheksa üksikmatust, lahkunud olid neisse sängitatud selili-siruli asendis, pead erinevates ilmakaartes. Neli surnut oli maetud kahte kaksikmatustesse, kus ühes olid surnud üksteise kõrval selili-siruli asendis ja teises asusid selili-siruli asendis ülekuuti.

Esemeleide (kokku 30) saadi ühishaudadest 2 ja 3. Ühishauast 2 leiti maetute kaelapiirkonnast kaheksa 17.–18. sajandi õigeusu kaelaristi (jn 4: 1–4), mis viitab, et maetud olid ilmselt Vene tsaaririigi sõjamehed, samuti leiti kolm kannaga nõöpi. Ühishauast 3 pärineb krooniga südasõlg (jn 4: 5) ja tõenäoliselt ühe sõduri vööal asunud kukkur, milles oli viis püssiluku tulekivi (jn 4: 6) ja kaks 1666. aastal löödud Rootsi 1/6 ööri. Samast hauast pärinevad kaks nõöpi, rauast pannal, aas ja kaks haaki. Lisaks avastati ühe indiviidi kaelapiirkonnast õigeusu kaelarist. Kaelarist ja kohalikele matmispaikadele iseloomulik südasõlg lubavad oletada, et sellesse hauda maeti mõlema osapoolse sõjamehi. Maetute juurest, nii kehast kui ka haudade põhjast, leiti 12 pliist püssikuuli (jn 4: 7–10), millest mitmed olid muutunud lapikuks, samuti kolm väikest malmist välikahuri kuuli (jn 4: 11–12).

Üles võetud luustikud kuulusid eranditult meestele, kellest enamik olid surnud vanusevahemikus 17–25 aastat, ehkki esines ka noorukeid ja vanemaid indiviide. Skelettidel leiti vaid surmavaid vigastusi, mis tunnistavad, et maetud olid hukkunud lahingus

või vahetult pärast seda. Luustikelt ei ole seni leitud lähivõitluse jälgi (nt terariista traumasid). Suurel osal tapetutest olid kuulihaavad (jn 5), näiteks ühe mehe skeletis oli lausa kolm pliikuuli ja üks väiksema välikahuri kuul (jn 6). Laskehaavu leidis nii koljul, rindkerel kui ka jäsemetel, pliikuule leiti koljude ja suuremate toruluude seest. Kuulid olid roided ja toruluud sageli kildudeks purustanud. Mitmel juhul oli löök peast poole ära rebinud. Tulirelva vigastuste rohkus näitab, et hukkunud surmati distantisilt.

Tõenäoliselt surid mehed 1704. aasta juunis-juulis Tartu piiramisel, võimalik, et isegi otsustaval tormijooksul, mis toimus matmispaigale küllaltki lähedal, mil ligi 6000 vene sõdurit murdis linnamüürist läbi. Linna ründas umbes 18 000 vene sõjaväelast, neile hakkas vastu ligi 4000 kaitsjat, vallutamisel kaotasid vene väed 3000–3400 ja rootsi väed 1400–2000 meest.

Ühishaudade leidmine oli erakordne, kuid samas ka oodatav. Juba aastaid on juureldud selle üle, kuhu maeti kõik need tuhanded, kes hukkusid Tartus ja selle ümbruses 16.–18. sajandi sõdades, epideemiate ja näljahädades. Siamaani teame vaid üksikuid ühishaudu linnamüüri sees olevates kirikaedades või nende ümbrusest. Tartu kohta mainitakse varauusaegse relvakonfliktide ja epideemiatega seotud kirjalikes allikates, et hukkunuid maeti linnast väljaspool.

Haud asusid Vene sõjameeste jooksukraavi linnapoolse otsa lähedal (jn 10) – selle kaudu tungisid vaenlased kuulide eest varjatuna linnakindlustuste vahetusse lähedusse. Laia tänava jõepoolse otsa juures asunud Vene värvate ja praeguse Tartu Ülikooli botaanikaia piirese jäävat lõiku kaitses kohalikest koosnev Põltsamaa pataljon, kellest enamik hukkus. Võimalik, et osa kolmandasse ühishauda maetuist kuuluvad nendele meestele.

Ébakorrapärane matmine ühishaudades 1–3 on kindlasti tingitud langenute suurest arvust, mistõttu neid ei saanud korralikult mulda sängitada. Tõenäoliselt toimus matmine ka kiirustades, kuna suvised ilmad põhjustasid surnukehade kiiret lagunemist. Ühishauad olid tänapäevasest maapinnast u 1,4 m, omaaegsest aga vaid 40–50 cm sügavusel. Madala matmissügavuse tingis tõenäoliselt vesine aluspind. Võimalik, et üksikmatuseid ja ühishaudu ei rajatud ühel ajal, vaid pikema aja jooksul.

Keeruline on öelda, kes olid langenute matjateks. Ühishaudade 2 ja 3 põhjal sai erandi sõduritele osaks sarnane matmisviis, surnud olid hauda visatud, vaid üksikhaudade ja ühishaud 4 puhul oli surnuid käsitletud teistmoodi. Vastaspooli sängitati nii eraldi haudadesse kui ka läbisegi. Kas matmine toimus juba

piiramise ajal või pärast linna alistumist, ei ole võimalik öelda, kuid viimane on tõenäolisem.

Lisaks matustele koguti Oa tänava kaevamistel kolmest arheoloogilisest ladestusest, mis pigem seostuvad kalmistust varasema asulakohaga, 16. sajandi II poole ja 17. sajandi keraamikat (jn 7), sama ajavahe-miku mündileide ja kokku 5867 loomaluud. Väikeste kalaluude ja taimsete makrojäänuste kogumiseks kasutati lisaks käsitsikogumisele ka vesisõelumist. Enim oli materjali hulgas veise jäänuseid, pisut vähem leiti lamba-, kitse- ja sealuid. Lõikejäljed näitavad, et nende seas olid esindatud nii köögi- kui ka toidu-jäätmed. Vähesel määral tuvastati hobuste, kasside ja koerte skeletiosi. Koeraluude hulgas oli märkimis-väärne lõikejälgedega reieluu (jn 8: 1–2). Metsikutest liikidest oli esindatud jänes. Linnuluude seas olid kõige arvukamad kodukanad ja haned, vähemal mää-ral kalkun, pardid, tedred, metsised, nurmkana ja laanepüü. Kahepaiksetest leiti konna luid. Kanaluude puhul avastati üks osteopetroosiga sääre-kannaluu (jn 8: 3–4). Üks hane sääre-kannaluu oli töödeldud (jn 8: 5). Kalaluude seas domineerisid mageveekalad, kuid leidis ka mitmeid merekalade (tursk, räim/hee-

ringas, lest, tuur) jäänuseid. Viimaseid tuleb seostada impordiga Eesti rannikult või veelgi kaugemalt (nt tursad). Mitmed austrikarpide leiud viitavad samuti eksootilisele (Atlandi ookeani rannikult pärit) toidule (jn 9). Säilinud taimede seemned (eriti teraviljad) seostuvad kohalike elanike toiduga, samas võidi otra kasutada ka õllepruulimise juures.

Eeslinna kujunemisest, millest sündis praegune Supilinn, saame rääkida 18. sajandi keskpaigast. Selleaegseid ladestusi oli võimalik uurida paiguti, suuresti olid need enne arheoloogiliste välitööde algust lõhutud.

Tartu Oa tänava avastus on esimene nii arvukas Põhjasõja-aegne sõdurite matmispaik Eestis aga ka terves Baltikumis. Märkimisväärne luuaines annab meile ideaalse võimaluse uurida inimluudel olevaid surmaaegseid vigastusi, hukkumise põhjuseid, veelgi enam annavad skeletid ka teavet värvatute eluviiside, toitumise ja tervise kohta. 16. sajandi teisest poolest on tõendeid eeslinna asustuse kohta, kogutud leiud ja loomaluud on oluline allikas sealsete elanike tege-vuse ja toitumisharjumuste osas.