

Archaeological studies in the Cistercian monastic complex in Padise

Villu Kadakas

Tallinna Ülikool, humanitaarteaduste instituut, ajaloo, arheoloogia ja kunstiajaloo keskus (Tallinn University, School of Humanities, Institute of History, Archaeology and Art History), Uus-Sadama 5, 10120 Tallinn, Estonia; villu.kadakas@tlu.ee

Monika Reppo

Tartu Ülikool, ajaloo ja arheoloogia instituut, arheoloogia osakond (University of Tartu, Institute of History and Archaeology, Department of Archaeology), Jakobi 2, 51005, Tartu, Estonia

Paul Ööbik

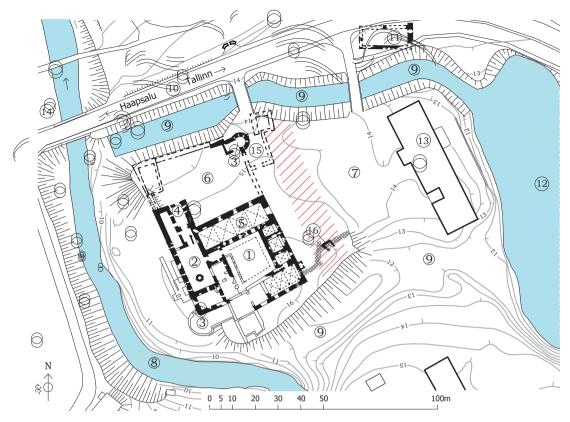
OÜ Agu EMS, Roosikrantsi 17, 10119 Tallinn, Estonia

INTRODUCTION

The ruins of the medieval Padise monastery are situated close to the north-western coast of Estonia, ca. 50 km south-west from Tallinn, on the western edge of the historical province of Harjumaa. In spring 2020 a visitor centre with an exhibition was opened in the well-preserved ruin of the Cistercian monastery. The conservation project was largely based on the results of the field studies of 2010–2011, which were published in AVE 2011 (Kadakas 2012b; Lõugas *et al.* 2012). In 2018–2019, additional field studies (for a short summary in Estonian, see Kadakas & Ööbik 2019) took place because of the conservation work (Fig. 1). Most of these studies were connected with laying various floors and pavements, also installing power cables and water pipes. Regardless of the moderate scope of the work, various information was obtained, regarding both the monastic and post-monastery period.

The monastery was established in the beginning of the 14th century on the lands of Daugavgrīva monastery and probably on the site of its former grange. Most of the preserved monastic complex was built probably during the 15th century. The main building, the monastic quadrangle, was built exceptionally as a fortress, like the conventual castles of the Teutonic Order. The monastery was secularized and turned into a proper castle in the beginning of the Livonian Wars, in 1559 by the Teutonic Order. Soon the former monastic complex was taken over by the Swedish army, who lost it for a short period to the Russian army (1576–1580). During the siege of 1580, the buildings suffered heavy damage and thereafter the site was used as a royal manor. In 1622 the estate was enfeoffed to Thomas Ramm. The former monastic complex was used by his descendants as a manorial residence for centuries. After the fire of 1766 the preserved building parts were turned into storerooms. Restoration work was carried out since the 1930s, large-scale excavations, mostly removal of collapse debris in the 1950s and 1960s were led by art historian Villem Raam.¹

¹ See the written history and the current state of research in detail in Kadakas 2012b, 58–62 and 2015a, 21–22; history of research and conservation in Tamm 2010, 119–121; Alttoa et al. 2012. Later, usage of water in the monastery has been studied in a separate article (Kadakas 2015b).



pipe trench of 2019 / 2019. a kaevatud torukraav

/// supposed area of the moat discovered in 2019 / 2019. a avastatud vallikraavi oletatav ulatus

Fig. 1. Plan of Padise monastic ruin area (main floor). 1 – inner courtyard, 2 – western courtyard, 3 – gun towers, 4 – gate tower, 5 – church, 6 – northern courtyard, 7 – eastern courtyard, 8 – River Kloostri, 9 – moat, 10 – road, 11 – foundations of a late medieval chapel discovered in 2009, 12 – pond, 13 – 18th century manor house, 14 – site of the watermill, 15 – gate complex discovered in 2011, 16 – building remains in the moat.

Jn 1. Padise kloostri vareme piirkonna plaan (peakorrus). 1 – sisehoov, 2 – lääne-eeshoov, 3 – haakpüssitornid, 4 – väravatorn, 5 – kirik, 6 – põhja-eeshoov, 7 – ida-eeshoov, 8 – Kloostri jõgi, 9 – vallikraav, 10 – maantee, 11 – 2009. a avastatud hiliskeskaegse kabeli vundamendid, 12 – tiik, 13 – 18. saj mõisahoone, 14 – vesiveski asukoht, 15 – 2011. a avastatud väravakompleks, 16 – hoonejäänus vallikraavis.

Drawing / Joonis: Villu Kadakas

DISCOVERY OF A MOAT IN THE EASTERN COURTYARD

A pipe trench, running in the east-west direction (Fig. 1), crossed the eastern courtyard which has largely remained unstudied until now. It is not clear if the eastern courtyard was built in the monastic period or was added only after it was turned into a castle. However, researchers have for a long time supposed that initially a moat must have surrounded the monastic quadrangle also on the eastern side. Villem Raam and architect Kalvi Aluve suggested that the moat was situated directly next to the eastern range, but during the excavations of 2010–2011 it appeared that there has been no moat in that area (Kadakas 2012b, 70–71). In 2019 in the profile of the pipe trench a cross-section of an at least 4 m deep and ca. 15 m wide depression could be documented, situated ca. 7 m towards east from the eastern range (Fig. 1). Based on this discovery, it seems likely that a ca. 15 m wide moat was running parallel to the eastern

range. The discovered moat is in correspondence with the plan of the supposed gate complex (Fig. 1: 15), which was discovered in 2010–2011 in the north-western corner of the eastern courtyard (Kadakas 2012b, 72). The L-shaped wall of the supposed gate passage reaches ca. 10 m to the east from the wall between the northern and eastern courtyard. It roughly corresponds to the width of the area between the eastern range and the discovered moat. It looks like there was a 7–10 m wide flat area between the monastic quadrangle and the eastern moat – probably some kind of an outwork. It is not clear, if this outwork was surrounded with its own curtain wall or a palisade near the moat – remains of it were not discovered in the pipe trench. Based on the new discovery, the plan of the gate complex can be supplemented: it must have had a gate also in its southern wall, enabling access to this eastern outwork (Fig. 1: 15).

Very scarce datable finds could be obtained from the filling layers of the moat, but it can be concluded that the filling did not take place in Late Medieval but rather in Early Modern times. After the fire of 1766 the new manor house was built in the eastern part of the eastern courtyard (Raam 1958, 72). It is likely that the moat was filled only after this fire. This conclusion is supported by soot and charcoal, also demolition debris with signs of fire damage among the filling layers of the moat. The earliest historical images of the eastern courtyard – the engravings by Fr. A. Darbes / J. Chr. Brotze from 1795 (Brotze 2006, 454–455) – depict no moat in the area anymore but a flat area with a new small garden building.

HOUSE REMAINS AT THE BOTTOM OF THE MOAT

Remains of a basement of a stone building were discovered at the bottom of the moat (Fig. 1: 16). The basement storey of this building has had at least one room, with an outer wall ca. 60 cm thick and a small rectangular candle niche in one of the walls. An 80–90 cm wide staircase up with limestone steps was added secondarily to the structure.

No certain information was obtained during the excavations about the building time or demolition of the house. However, based on general context it could have been built after the moat had lost its military function, i.e. during the 17th or 18th centuries. The building must have been demolished when the moat was filled at the latest. The dilapidation of the house could be connected with written evidence – description of the fire of 1766 by Thomas von Ramm, the lord of the manor at the time. Among the buildings destroyed by the fire he listed 'a small house at the bottom of the moat' (Ridbeck 2005, 168; Tamm 2010, 118). In the present state of research there is no evidence about any other house being situated at the bottom of the moat neither at that time nor any other.

MODERN FLOORS OF THE BASEMENT ROOMS

The floor level in most of the basement rooms of the northern and eastern ranges was brought deeper by 10–20 cm, in some cases even more. The top of the floor level was covered with soil containing various debris, but extensive remains of brick or limestone floors had been discovered in the test pits of 2010 in several rooms. In all the basement rooms of the eastern range brick floors were uncovered and recorded (Fig. 2). These consisted of a wide variety of wall bricks as well as square thin floor tiles of different size. It is likely that most of this material has been used secondarily, after initial use in some main floor rooms of the former monastic complex or the new manor house from the late 18th century. Based on finds from the soil below the floors it can be concluded that all the brick floors were laid not before the 19th century. However, some of the used material, especially the square floor tiles might originate from



Fig. 2. Tile floor in a basement under the supposed parlatory.

Jn 2. Tellispõrand oletatava parlatooriumi aluses keldris. Photo / Foto: Villu Kadakas older periods. It cannot be excluded that some of the square floor tiles originate from the monastic period, although there is no evidence about the use of such unglazed tiles in Padise in the Middle Ages. No glazed or otherwise decorated tiles were found in the basement rooms of the eastern range. A large part of the brick floor could be preserved and exposed *in situ* in the basement room under the chapter hall. The late date of the brick floors is a clear evidence that the basement rooms of the former monastic complex had not been neglected but were intensively used for storage and even reconstructed to some extent during the 19th century.

Floors of irregular split limestone were uncovered and recorded in the middle basement room of the northern range and the room under the sacristy, discovered in the latter case under the brick floor described

above. Both floors had the lowest beam of timber partition walls which had been built before the floors, still preserved between the slabs. The partition walls were obviously connected with the storage function of the basement rooms. Both limestone floors were preserved, but in their more uneven parts the slabs were taken up and laid anew in their original place in order to gain a smooth surface. As the soil under the limestone floors was not excavated, no direct evidence of their age could be obtained. However, based on general context, these probably come from the period after the fire of 1766.

ALTAR REMAINS OF THE UNDERCROFT CHAPEL

Among all the basement rooms the easternmost one of the northern range, under the eastern part of the church deserves special attention (Fig. 3). Considering the rib vaults and a carved masonry pillar, exceptional in the basement storey of the monastic quadrangle of Padise, and especially the carved remains of consecration crosses in the plaster of the walls, this room has been estimated to have been an unconventional undercroft chapel in the monastic period. Raam supposed that the undercroft chapel was necessary to accommodate the side altars which did not fit into the unconventionally small church of the fortified quadrangle (Raam 1988, 59; Alttoa 2012b, 63).

Raam (1958, 61) has described here some stones as preserved evidence of one of the altars. A rectangular foundation $(2.0 \times 1.37 \text{ m})$ of a structure built next to the northern wall, in front of the western window has been visible in its full extent for at least two decades, but it is not known when it was fully uncovered. During the excavations of 2019 the western half of an identical foundation was discovered in front of the eastern window of the northern wall (Fig. 3: 1). The foundations of more altars were searched for in vain, as much of the upper soil under the chapel has been disturbed during the Early Modern period.

However, an unexpected match of the altar foundations and a medieval limestone mensa (see: Mänd 2019, 146–147) of the chapel of the nearby Väike-Pakri island could be made.

During the last centuries the mensa was part of the small timber chapel (Söderbäck 1940, 282-284), which was destroyed after the World War II within a Soviet military base. During an expedition in 2014 the site was studied and the mensa described and measured. It was interpreted to be unproportionally big for the small timber chapel and a hypothesis was presented, that it was initially made for Padise monastery and brought to the island only after the dissolution of the monastery, in the Early Modern period (Kadakas 2015c, 16; see also: Mänd 2019, 146-147), when the island belonged to Padise manor.² The measures of the mensa (lower rim 208 × 139 cm) match the foundation (200 \times 137 cm) in the undercroft chapel of Padise monastery rather well. As regards the minor mismatch, it should be kept in mind that only the underground foundation has preserved, not the block (stipes) of the altar above the floor. However, as there was

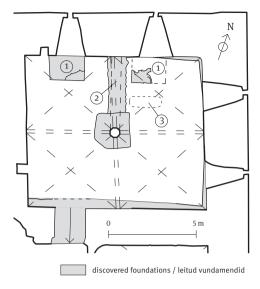


Fig. 3. Plan of the undercroft chapel. 1 – foundations of altars, 2 – foundation of partition wall, 3 – site of a burial.
Jn 3. Kelderkabeli plaan. 1 – altarite vundamendid, 2 – vaheseina vundament, 3 – haua asukoht.
Drawing / Joonis: Villu Kadakas

at least one more altar with the same size in the chapel, the mensa cannot be connected with the particular altar. The mensa of Väike-Pakri could have come from any of the altars of the undercroft chapel, which all were possibly of approximately the same size. The mensa of Väike-Pakri has a semicircular cavity ($\emptyset = 23$ cm) in the middle of its back edge. It was probably made for attaching a timber crucifix to keep when not used during processions. It was common with the altar of the Cistercians to keep the processional cross behind it (Kinder 2002, 172; Gaud & Leroux-Dhuys 2006, 52).

An 80–90 cm thick foundation of a partition wall was recorded, running between the pillar and the northern wall, situated between both altar remains (Fig 3: 2). This wall still stood about 2 m high on the earliest photos from the 1920s, e.g. by Nikolai Nyländer (Tuulse 1942, Abb. 184; TÜKAF, s B-60-42³), but was demolished, as a presumably post-monastic element during later restoration work. However, screens or partition walls between side-altars dividing these into separate chapels were not uncommon in the Late Medieval churches (Rodwell 2012, 164–165). Therefore, it cannot be excluded that this particular wall was not an Early Modern addition, but from the monastic period. Remains of other, similar partition walls were searched for in vain. Two altars with a partition wall which formed two separate chapels, are depicted in the eastern end of the undercroft chapel of the other Cistercian monastery in Estonia – Kärkna, on a disputed reconstruction plan by Reinhold Guleke (1896, Plate IV, VI & VIa; Alttoa 2012a, 35).

In addition to the glazed floor tile fragments (brown, green and yellow) found in 2010–2011 in the undercroft chapel (Kadakas 2012b, 63), some similar new ones were found in 2019. Based on the identification of altar foundations, it can be supposed that some floor parts

² Thomas Ramm, the owner of Padise manor, got the island of Väike-Pakri from the king of Sweden in 1628 (Russwurm 1855, 141–142; Johansen 1951, 226–227).

³ Available online: https://dspace.ut.ee/handle/10062/38966 (visited 22.09.2020).

in immediate connection with the altars were laid with these glazed tiles. Evidence of such glaze tile floor patches in connection with altars have been discovered in the nunnery of St Bridget (Pirita) near Tallinn (Tamm 2002, 129–130).

During the last episode of field study of the undercroft chapel – preparing a small pit for a lamp post – a human skull was discovered. Further study revealed that it is a part of a preserved skeleton (Fig. 3: 3) of a person, who has been buried in front of the eastern altar, with the head directed to the west. A new pit was dug for the lamp so that the burial was preserved untouched for future fieldwork. It is the first evidence in Padise that someone has been buried in the undercroft chapel. Brief *in situ* inspection of the skull certified that it probably belongs to an adult person, probably a male. It is likely that the person was buried during the monastic period.

No further evidence was obtained about a building preceding the monastic quadrangle, which was supposed during fieldwork carried out in 2010–2011 (Kadakas 2012b, 63).

EVIDENCE ABOUT EARLY MODERN REBUILDING OF THE CHURCH

The most remarkable research results on the main floor were obtained in the church. It has been long known that the church was divided with two partition walls and timber floors into several dwelling rooms by the von Ramm family, who had acquired the estate in 1622 (Raam 1958, 72). The timber ceiling and the eastern partition wall had collapsed or been demolished by 1954 already, but the last elements – the western partition wall together with a kitchen – the large mantel chimney – were demolished in 1956 (Raam & Zobel 1957, 19–20, 35). Unfortunately, it was done without recording. These have only been depicted on a ground plan and a longitudinal section from the 1920s (photocopies by Eduard Selleke (TÜKAF, s C-60-84) and a few odd photos by Nikolai Nyländer (TÜKAF, s B-60-435). In 2019 the foundations of the partition walls came to light and were recorded after the removal of only a thin layer of debris (Fig. 4: 8, 9; 5). The upper soil (10–30 cm) was removed from the eastern and western parts of the church, above the western basement room and the undercroft chapel.6

In the western part of the church a 1 m thick partition wall (Fig. 4: 9; 5) was uncovered next to the portal of the lay brothers (Fig. 4: 4; 5). It divided the western vault from the rest of the church into an almost square hall (ca. 9.3 m) with a huge mantel chimney (ca. 3.8×2.0 m) in the corner (Fig. 4: 10; 5). Most of this hall interior is still covered with a floor of square limestone slabs, which were uncovered from a thin layer of debris (Fig. 4: 12; 5). The size of the slabs (52–53 cm) corresponds to one ell of Tallinn. These remains of the floor have been known for decades, but have never been documented, but rather ignored as an Early Modern addition to the church.

Traces of a narrow doorway were recorded in the middle of the partition wall. Remains of a winding mural (ca. 0.7 m) staircase leading downstairs, were recorded within the northern end of the partition wall (Fig. 4: 11; 5). The lower part of this staircase in the basement room has been demolished decades ago, but its foundations were uncovered in 2019. A rectangular foundation (1.5×1.5 m) of red bricks of a tiled stove or a fireplace was recorded on the eastern side of the partition wall next to the kitchen (Fig. 4: 13; 5). The room directly to the east of the partition wall had been covered with a floor of red bricks of which two rows had been preserved next to the partition wall.

⁴ Available online: https://dspace.ut.ee/handle/10062/38369 (visited 22.09.2020).

⁵ Available online: https://dspace.ut.ee/handle/10062/36569 (visited 22.09.2020).

⁶ The vault of the middle basement room collapsed in the 1990s and during the reconstruction of it the soil on top of the vault was removed without archaeological methods and recording.

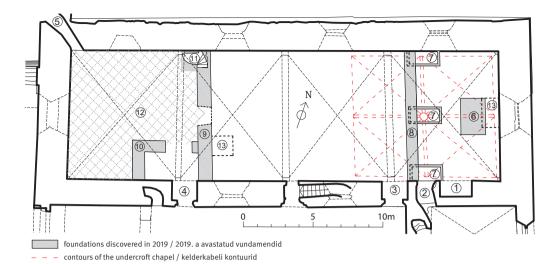


Fig. 4. Plan of Padise monastery church. 1 – sedilia niche, 2 – sacristy portal, 3 – choir monks' portal, 4 – lay brothers portal, 5 – passage to the gate tower, 6 – foundation of the main altar, 7 – burial vault, 8 – foundation of the eastern partition wall, 9 – foundation of the western partition wall, 10 – foundation of the kitchen wall (mantel chimney), 11 – stairs to the basement, 12 – floor of square limestone slabs, 13 – foundations of tiled stoves.

Jn 4. Padise kloostri kiriku plaan. 1 – sedilia nišš, 2 – käärkambri portaal, 3 – koorimunkade portaal, 4 – ilmikvendade portaal, 5 – käik väravatorni, 6 – peaaltari vundament, 7 – hauakast, 8 – idapoolse vaheseina vundament, 9 – läänepoolse vaheseina vundament, 10 – köögi (mantelkorstna) vundament, 11 – trepikäik keldrisse, 12 – ruudukujulistest paeplaatidest põrand, 13 – kahhelahjude vundamendid.

Drawing / Joonis: Villu Kadakas

Within the lime mortar used for fixing the floor slabs a poorly preserved coin was found – a Swedish schilling of Eric XIV or John III, with a greater coat of arms of Tallinn, minted in the period 1564-1585 (Leimus et al. 2018, 74). It might indicate that the partition wall with the mantel chimney and the floor were not laid in the von Ramm period after 1628 but probably earlier, during the period of the royal manor already. It is possible that the church room was not filled with partition walls and a timber ceiling during one construction campaign, but possibly in several stages. It is not clear if the rest of the church room remained in use as a church for a while after turning its western part into a large square hall.

In the eastern part of the church, between the choir monks' portal and the sacristy portal, a foundation of a rather thin (ca. 0.8 m) partition wall was uncovered (Fig. 4: 8; 6). Extensive remains of a floor of irregular



Fig. 5. The floor of square limestone slabs, foundations of a tiled stove, a partition wall and the mantel chimney in the western part of the church.

Jn 5. Ruudukujulistest paeplaatidest põrand ning kahhelahju, vaheseina ja mantelkorstna vundamendid kiriku lääneosas.

Photo / Foto: Paul Ööbik



Fig. 6. Three burial vaults, foundations of a tiled stove, the main altar and a partition wall in the eastern part of the church.

In 6. Kahhelahju, peaaltari ja vaheseina vundamendid ning kolm hauakasti kiriku idaosas. Photo / Foto: Paul Ööbik

limestone slabs was uncovered on its western side. On its eastern side, in the eastern part of the church, remains of underlay beams of a timber floor probably from the 19th century were recorded.

THE MAIN ALTAR AND BURIAL VAULTS IN THE CHURCH

Next to the eastern wall of the church, on the symmetry axis, a rectangular, ca. 1.2×2.6 m foundation was discovered. After preliminary enthusiasm, it appeared not to be a foundation of the medieval main altar but rather of an Early Modern tiled stove (Fig. 4: 13; 6). Nevertheless, the rectangular foundation of the altar (1.8×2.6 m) was discovered under it, set 1 m off the eastern wall (Fig. 4: 6; 6). This location is in accordance with the medieval tradition of the Cistercian monks to move in a procession through the back of the altar when receiving the Holy Communion (Kinder 2002, 172). No foundations of side altars were discovered, but some may lay hidden deeper than was excavated. All the side altars did probably not fit into the undercroft chapel, because in 1448 more than a dozen was mentioned to exist in Padise (Alttoa 2012a, 47).

As a surprise, three large boxes of limestone were discovered under this partition wall (Fig. 4: 7; 6). These resemble the burial vaults, which are common in parish churches, usually covered with a limestone grave slab. A narrow test pit was dug into the middle one, which revealed no human bones neither in the filling debris nor at the bottom. Nevertheless, it seems most likely that these have been burial vaults. The inner size (on the average 1.1×2.0 m, ca. 1.2 m deep), is fit for one coffin. Probably the vaults have been looted and filled with demolition debris after removing the grave slabs.

In the Middle Ages the common choir monks were normally buried without a grave sign into the graveyard next to the church. Burial vaults with stone grave slabs for abbots were located either in the graveyard, in the floor of the church (close to the stall in the choir or adjoining the high altar), in the cloister between the church and the chapter hall or in the chapter hall (Butler 1993, 78–79; Untermann 2001, 90–92; Kinder 2002, 366). The three burial vaults of Padise church are peculiar because these have not been built into the ground as burial vaults normally are, but on top of the vaults of the undercroft chapel. The top of the vaults of the chapel reach almost to the floor level of the church, but the space between the vaults is at least 2 m high. The three burial vaults use the only three areas above the chapel vaults, where a burial vault could be installed in the east-west direction. The middle one is on top of the pillar of the chapel and the other two are on the same line, next to the side walls. It is a rare, skillful technical solution, never recorded in Estonian churches of any period.

It could be supposed that some significant abbots or donators were buried inside these burial vaults. These cannot be connected with any grave slabs, because none have been preserved in the monastic ruin. Only a few very small fragments in the assemblage of dressed limestone details of the monastery could be theoretically connected with grave slabs.

ARTEFACTS

Ceramic vessels

In general, most of the new finds share the distribution and deposition patterns of the previous fieldwork of 2010-2011 (Kadakas 2012b, 74-75; Kadakas & Väisänen 2012, 326). The finds in the basement rooms can be mostly dated to the Early Modern, the private manor period. However, in the church and sacristy, within the filling layers on top of the basement vaults, also in some basement rooms, a few sherds of Siegburg and Waldenburg stoneware beakers or jugs could be collected. The earliest sherds of Siegburg vessels can probably be dated to the second half of the 14th century (Sieg3b jacoba I after Russow 2006, fig. 12: 3). It is difficult to estimate, how many of these or if any at all were deposited during use of these vessels in these rooms. According to the present state of research, the northern and eastern ranges were probably built step by step during the 15th century (Alttoa 2012b, 77; Kadakas 2012b, 69). At least in the rooms of the main floor (church and sacristy), it is likely that the sherds have been brought in together with the large amount of sand, which was necessary to fill the top of the basement vaults, during the construction of the initial floors already. A single sherd of a Cologne stoneware jug, with characteristic plant ornamentation, probably from the second quarter of the 16th century, possibly represents the final decades of the monastery.

As in 2010–2011 (Kadakas 2012b, 76; Kadakas & Väisänen 2012, 334), a few sherds of simple Russian pots probably represent the short period of inhabitancy of the Russian troops (1576–1580). In correspondence with the results of previous fieldwork (Kadakas 2012b, 76; Kadakas & Väisänen 2012, 333–336), the period of the private manor (1622–1917) is represented by sherds of simple glazed redware pipkins, painted redware bowls, various painted and unpainted faience, clay pipes, painted china, Duingen stoneware and ceramic mineral water bottles. Some of the redware pipkins, painted bowls, or even the early faience may theoretically come from the Swedish royal manor period (1561–1622). A few sherds of Westerwald stoneware were new in the assemblage of Padise.

Floor and stove tiles

As in 2010–2011, a few fragments of glazed (yellow, brown and green) redware floor tiles were found from the undercroft chapel (Kadakas 2012b, 76; Kadakas & Väisänen 2012, 336–337), but now some were also found in the eastern part of the church. It supports the hypothesis presented after the previous fieldwork that such prominent material was reserved only for the most important areas of the monastery, the surrounding of the altars (Kadakas 2012a, 90).

It was common in the medieval Cistercian monastic churches to build floors of glazed ceramic tiles, often with a square form. Monochrome glaze tiles with a few contrasting colours were usually laid in geometric patterns. It was common to reuse these by local people in their dwellings after the dissolution (Beaulah 1993, 1–4).

Fragments of various glazed stove tiles were discovered in the rooms of both the main and the basement floor (Fig. 7). Most of the stove tile fragments in the basement rooms have probably been brought there together with demolition debris, although some foundations and chutes indicate that at least some basement rooms had a stove or a fireplace at some moment. A lot of panel tile fragments in the rooms of the main floor – dwelling rooms in the private manor period – were gathered close to the discovered stove foundations. The few stove foundations correspond to the smoke chutes, still preserved inside the walls or chimneys, depicted on the Early Modern engravings. It is likely that earlier tiled stoves were replaced on the same foundation with new ones as time passed, at least until the fire of 1766. Among the new fragments there are a few with Renaissance style motifs (mostly low relief floral patterns), and with monochrome green or black glaze. Most represent the late 17th and 18th century Baroque style stoves with abundant plant ornamentation, with monochrome black or white glaze. In the case of most of the stoves, only a few fragments could be collected, but



Fig. 7. A selection of 17th century glazed stove tile fragments. Jn 7. Valik 17. sajandi ahjukahlite kilde. Photo / Foto: Villu Kadakas

in a room on the south-eastern corner of the complex, a huge heap of tiles with white glaze was unearthed. Reconstruction of the particular stoves, based on both the information in the fieldwork reports in the 1950s and 1960s⁷ and on new excavation results, falls outside the scope of this article.

Coins

Among a few various Early Modern copper coins, found in various rooms, two silver coins from the monastic period were discovered in the church – one on top of the floor of regular limestone slabs in the western part, and the other inside the filling of the midmost burial vault. As a surprise, both appeared to be *seestlings* of the Teutonic Order, minted in Tallinn at the end of the 14th or at the beginning of the 15th century, valid until the monetary reform of Livonia (1422/1426). According to the present state of research the church was not completed until the middle of the 15th century (see above). Therefore, it is difficult to connect these coins with the use of the church. Furthermore, coin offering is not an expectable practice⁸ in the church of Padise monastery, because the monastic churches of the Cistercians were normally not open for lay people. It is possible that these coins have been lost by the builders during the construction work or brought inside with the sand, which was used to fill the empty space above the basement vaults.

Iron artefacts

Among the metal artefacts a large collection of various forged iron fittings and tools was discovered under the tile floor of the basement under the supposed parlatory. All these artefacts indicate heavy damage by fire and have probably been dumped at the same time. It includes fittings of doors and windows (window and door hinges, window bars, locks, threaded bolts, threaded nuts, rings, nails) and a few tools (spade, ice pick). Nuts and bolts with threaded ends deserve attention, as examples of early thread making craftmanship, probably by a local blacksmith. One strap hinge of a door has an elaborate decorative leaf with scroll design, characteristic to the 17th and 18th centuries. Window angle brackets of the so-called dove beak type also fit to this period. It is likely that all these items were damaged and became unusable during the fire of 1766.

Glass artefacts

Over 1,000 fragments of glass were recovered during the field study in 2018–2019. Roughly half of the fragments can be attributed to the private manor period of the former monastery building and the other half are connected to the house remains which were uncovered at the bottom of the moat. Most of the glass was post-medieval, yet there were some earlier fragments.

In terms of medieval finds relating to the monastery, the base of a 14th–15th century beaker was discovered in the basement of the northern range. A rim fragment of an undecorated beaker potentially from the same period was discovered in the filling soil of the middle burial vault in the church. Although the rest of the glass artefacts from the house remains found in the bottom of the moat were later, a small poorly-preserved body fragment of a beaker with an applied rib was found here, generally dated to the 14th–15th century (Fig. 8: 3).

⁷ The location of the find material of the early field studies is unknown (Kadakas & Väisänen 2012, 326), but many stove tiles have descriptions and are depicted on black and white photos.

⁸ About coin offering in the rural churches of Estonia see Kadakas 2017, 125-127.



Fig. 8. Fragments of glass vessels. 1 – of medieval beaker, 2 - of square case bottle, 3 - beaker rim from the middle burial vault, 4 – foot of early Roemer.

Jn 8. Klaasnõude katked. 1 – keskaegne peeker, 2 – tahuline pudel, 3 – peekri serv keskmisest matusekastist, 4 – varase röömeri jalg.

Photo / Foto: Monika Reppo

From the earlier private manor period, numerous glass sherds, mainly window glass were found. Most of these are related to the house in the moat. These sherds are heavily weathered and show some signs of soot and heat damage, potentially from the 1766 fire. The window glass is largely unworked with uneven edges. This indicates it was 'broad glass' – blown as a cylinder, cut open and flattened, forming the wavy edges. It seems the glass was in place as larger panes. Some have been grozed (knapped) to fit into lead cames and cut into smaller rhomboid and narrow rectangular panes.

It has also been possible to identify Early Modern red stained glass. The fragments of stained glass are red only on one side. As solid red glass does not let enough light through, one side of a colourless glass pane was flashed with a thin sheet of red glass to allow for a lighter red. At present it appears some of the glass may also be tinted red due to weathering. The vessel glass was harder to identify but most of it appears to be from a 17th–18th century square case bottle. The finds are in keeping with the potential *terminus ante quem* of the house.

Square case bottle fragments were discovered also from within the Padise monastery complex both from the westernmost basement room of the northern range but also from the eastern range. A potentially early 17th century Roemer base (Fig. 8: 4) was found from the westernmost room as well. Further evidence of alcohol consumption on site during the 17th–18th century period comes from fragments of lead crystal goblets and onion-shaped wine bottles from the basement rooms of the eastern range. A small squat colourless hand-blown medicine bottle was also found here. It is notable that no drinking vessel fragments from this period were found from the first floor though a heavy lead crystal footed bowl discovered from the monastery may be from the late 18th century.

Most of the glass from the 2018–2019 fieldwork season in Padise is from the 19th century. In terms of spatial distribution, the basement rooms of the northern range stand out. Several hundred cylindrical bottles from the mid-19th century had been discarded here, some dug into pits. The bottles were mostly broken, however, none of them had any signs of iridescent weathering common for archaeological glass. The bottles were likely placed here in one piece as dozens of cork tops were found as well, several still attached and many of the bottles can be reconstructed from the fragments.

Due to the sheer size of the collection, conclusions can be drawn in terms of glass production in Estonia but also glass consumption in the manor in the mid-19th century. Bottles from at least four different glass factories were present – Lelle (Eidapere), Vändra, Tudu and Robert Elfenbein Reval (Fig. 9). All are represented by bottles with seals from the early 1860s. Regionally speaking, the former two factories are situated near Pärnu in western Estonia, Tudu in eastern Estonia and Robert Elfenbein produced bottles in Tallinn in northern Estonia. The discovery of bottle seals of Robert Elfenbein Reval is notable as none have been published – neither from Tallinn nor elsewhere in Estonia. It is unclear when he operated. The private purchase of the plot and building at Tartu Road plot 752 A, Tallinn in 1857 could

potentially signify the start of production. Robert Elfenbein's factory was put on auction in November 1863.9 These dates clearly correspond with the rest of the dated bottle seals.

Almost all the 19th century bottles were cylindrical wine or beer bottles made of green forest glass alluding to consumption of alcoholic beverages within the complex during the 19th century. Similar larger groups of cylindrical bottles were found also in some of the basement rooms in the eastern range.



Fig. 9. Seals from Robert Elfenbein Reval, Tudu ja Lelle. Jn 9. Robert Elfenbein Reval, Tudu ja Lelle pudelimärgid. Photo and retouch / Foto ja retušš: Monika Reppo

Other 19th century vessels from the basement rooms include fragments of milk-souring bowls, also produced locally, rummers (shot glasses) and medicine bottles. Very few window and no stained glass fragments were recorded within the complex.

CONCLUSION

The field study of 2018 and 2019 gave new information about several important questions concerning the development of the large building complex of Padise monastery, as well as social history of the site, based on artefacts.

On the eastern side of the monastic quadrangle a filled moat was discovered. During the Middle Ages, probably a ca. 7 m wide outer ward existed between the eastern range of the monastic quadrangle.

Among the basement rooms the undercroft chapel under the eastern part of the church gave spectacular results. Two foundations of altars were recorded. Comparing the measures enables to bring these altars into connection with the mensa of a chapel on the nearby island Väike-Pakri. Most likely the mensa was originally in the undercroft chapel, but was taken to the island after the dissolution of the monastery in the 17th century.

On the main floor the most significant results are from the church. Foundations of two partition walls, a mantel chimney, stairs to the basement, also some floor fragments and tiled stove foundations from the post-monastic period were uncovered and recorded. Among the floors, the one in the western part of the church, made of regular square limestone slabs, is most remarkable. Based on artefacts, it can be supposed that this floor with the western-most partition wall and the mantel chimney are older than previously thought – not from the private manor period (1622–1917), but from the Swedish royal manor or the castle period (1563–1622). Based on new analysis, it can be supposed that the church hall was not filled in one building campaign but at least two.

Discovery of a foundation of the main altar and three limestone burial vaults in the eastern part of the church enable to get a basic idea of the inner layout of the monastic church. The location of the burial vaults on top of the vaults of the undercroft chapel testify about a unique technical solution in the specific built circumstances of Padise monastery.

Abundant finds of the post-monastic period – glazed redware pipkins, glazed and painted redware bowls, various painted and unpainted faience, clay pipes, painted china, Duingen

⁹ According to Endel Varep, Robert Elfenbein produced glass on Wismari (Vaestekooli) Street in 1861. However, the local newspapers from the period mark Tartu Road 752A (now on the corner of Lastekodu and Odra Streets) as the site of the factory (Revalsche Zeitung 15.11.1863, 4; Varep 1962, 203).

and Westerwald stoneware, ceramic mineral water bottles, red brick floor tiles, various glazed stove tiles – enrich the knowledge about the everyday life and interiors of the manor period. A number of fragments from medieval Siegburg and Westerwald stoneware drinking vessels and three glass beaker fragments enable limited conclusions of the household of the monks.

ACKNOWLEDGEMENTS

The authors are most grateful to Heli Nurger, Leemet Vaikmaa and Veljo Männiste who facilitated the fieldwork in various ways as representatives of the municipality, to architect Mart Keskküla for various professional advice and discussions, to Kaur Lillipuu and to several BA students of the Estonian Academy of Arts for generous assistance during fieldwork. This article was supported by the research grant TF2119 of Tallinn University.

REFERENCES

- Alttoa, K. 2012a. Kärkna tsistertslaste klooster. Kärknan sisterssiläinen luostari. – Padise ja Vantaa. Keskaja sild Padise ja Vantaa vahel. Keskiajan silta Padisen ja Vantaan välillä. Ed. by E. Russow. Padise, 33–50.
- Alttoa, K. 2012b. Padise kloostri ehitusloo probleeme. Padisen luostarin rakennushistorian ongelmia. – Padise ja Vantaa. Keskaja sild Padise ja Vantaa vahel. Keskiajan silta Padisen ja Vantaan välillä. Ed. by E. Russow. Padise, 63–80.
- Alttoa, K., Keskküla, M. & Keskküla, L. 2012. Padise kloostrivaremete ehituslik minevik ja tulevik. Padisen luostarin raunioiden rakennustekninen menneisyys ja tulevaisuus. Padise ja Vantaa. Keskaja sild Padise ja Vantaa vahel. Keskiajan silta Padisen ja Vantaan välillä. Ed. by E. Russow. Padise, 149–180.
- Beaulah, G. K. 1993. Thirteenth century square-tile mosaic pavements at Cistercian houses in Britain. Studies in Cistercian art and architecture. Vol. 4. Ed. by M. P. Lillich. *Cistercian Studies Series*, *134*, 1–14.
- Brotze, J. Chr. 2006. Estonica. Ed. by A. Hein, I. Leimus, R. Pullat & A. Viires. Tallinn.
- Butler, L. 1993. Cistercian abbots' tombs and abbey seals. Studies in Cistercian art and architecture. Vol. 4. Ed. by M. P. Lillich. *Cistercian Studies Series*, 134, 78–89.
- **Gaud, H. & Leroux-Dhuys, J.-Fr. 2006.** Cistercian Abbeys. History and architecture. Cologne.
- Guleke, R. 1896. Alt-Livland. Mittelalterliche Baudenkmäler Liv-, Est-, Kurlands und Oesels, Folge III. Leipzig.
- Johansen, P. 1951. Nordische Mission, Revals Gründung und die Schwedensiedlung in Estland. Kungl. Vitterhets historie och antikvitets akademiens handlingar, Del 74. Stockholm.

- Kadakas, V. 2012a. 2010.–2011. aasta väljakaevamised Padise kloostri klausuuris. Vuosien 2010–2011 kaivaukset Padisen luostarin klausuurissa. Padise ja Vantaa. Keskaja sild Padise ja Vantaa vahel. Keskiajan silta Padisen ja Vantaan välillä. Ed. by E. Russow, Padise, 81–116.
- **Kadakas, V. 2012b.** Archaeological studies in Padise monastery. AVE, 2011, 57–82.
- **Kadakas, V. 2015a.** Padise Monastery. The Heritage of Padise. Padise. 10–23.
- Kadakas, V. 2015b. Usage of water in the fortified monastery of Padise. Castella Maris Baltici, XI. Proceedings of a symposium held in Malmö, Sweden, on the 27th of May to the 2nd of June 2012. Ed. by A. Gutehall, A. Ödman & Ch. Ödman. *Archaeologia Medii Aevi Finlandiae, XX, Malmöfynd,* 22. Malmö, 113–122.
- **Kadakas, V. 2015c.** Arheoloogiline uuring Väike-Pakri kiriku varemes. Tallinn. (*Manuscript in MA*.)
- **Kadakas, V. 2017.** Archaeological studies in the church of Haliala. AVE, 2016, 109–130.
- Kadakas, V. & Väisänen, R. 2012. Padise tsistertslaste kloostri ning Gubbacka ja Mårtensby asulakoha keraamikaleidudest. Padisen sisterssiläisluostarin sekä Gubbackan ja Mårtensbyn kylätonttien keramiikalöydöistä. – Padise ja Vantaa. Keskaja sild Padise ja Vantaa vahel. Keskiajan silta Padisen ja Vantaan välillä. Ed. by E. Russow. Padise, 325–352.
- **Kadakas, V. & Ööbik, P. 2019.** Uuringud Padise kloostris. Tutulus, 2019, 54–55.
- **Kinder, T. N. 2002.** Cistercian Europe. Architecture of contemplation. Grand Rapids-Cambridge.
- Leimus, I., Kiudsoo, M. & Haljak, G. 2018. Sestertsist sendini. 2000 aastat raha Eestis. Tallinn.
- Lõugas, L., Maldre, L., Tomek, T. & Kadakas, V. 2012. Archaeozoological evidence from the Padise monastery. – AVE, 2011, 83–92.

- **Mänd, A. 2019.** Keskaegsed altarid ja retaablid. *Eesti kirikute sisustus, 4.* Tallinn.
- **Raam, V. 1958.** Padise klooster. Падизеский монастырь. Padise monastery. Tallinn.
- Raam, V. 1988. Padise klooster. Harju rajooni ajalooja kultuurimälestised. Ed. by E. Vainu. Tallinn, 53–67.
- Raam, V. & Zobel, R. 1957. Aruanne end. Padise kloostri objektil 1954.–56. a. teostatud töödest. Köide I. Dokumentatsioon ja ehitusalased tööd. Tallinn. (Manuscript in MA.)
- Revalsche Zeitung 1863. Bekanntmachungen, 15.11, 4. Ridbeck, H. 2005. Padise läbi aegade: kodulooraamat. Tallinn.
- **Rodwell, W. 2012.** The archaeology of churches. Amberley.
- Russow, E. 2006. Importkeraamika Lääne-Eesti linnades 13.–17. sajandil. Tallinn.

- Russwurm, C. 1855. Eibofolke oder, Die Schweden an den Küsten Ehstlands und auf Runö: eine historischethnographische von der Kaiserlichen Akademie der Wissenschaften zu St. Petersburg mit einem demidowschen Preise gekrönte Untersuchung. Reval.
- Söderbäck, P. 1940. Rågöborna. Nordiska Museets Handlingar, 13. Stockholm.
- Tamm, J. 2002. Eesti keskaegsed kloostrid. Tallinn.Tamm, J. 2010. Padise klooster. Ehitus- ja uurimislugu.Tallinn.
- TÜKAF = Photo collection of art history of the University of Tartu. Available online: https://dspace. ut.ee/handle/10062/34121 (last accessed 22.09.2020.)
- **Tuulse, A. 1942.** Die Burgen in Estland und Lettland. Õpetatud Eesti Seltsi Toimetused, XXXIII. Dorpat.
- **Untermann, M. 2001.** Forma Ordinis. *Kunstwissenschaftliche Studien*, *89*. München, Berlin.
- Varep, E. 1962. Klaasitööstusest Eestis. Peatükk Eesti loodusvarade kasutamise ajaloost. Eesti Loodus, 4, 199–204.

ARHEOLOOGILISED UURINGUD PADISE KLOOSTRIS

Villu Kadakas, Monika Reppo ja Paul Ööbik

2020. a kevadel keskaegse Padise kloostri varemetes avatud külastuskeskuse ja selle ekspositsiooni loomiseks toimusid 2018.-2019. aastal uuringud, mis olid enamasti seotud sillutiste, põrandate, kaablite ja torustike paigaldamisega. Hoolimata töö vähesest mahust saadi mitmesugust informatsiooni nii kloostri kui ka hilisema mõisa ajajärgu kohta. Klausuuri ja 18. sajandil rajatud mõisahoone vahel laiuva ida-eeshoovi kohta (jn 1) oli seni teadmisi väga vähe. Oletuste järgi ümbritses kindlustatud klausuuri keskajal ka idaküljel vallikraav, kuid 2010.-2011. aasta väliuuringutel selgus, et vahetult klausuuri ääres seda ei olnud. 2019. a avastati ida-lääne suunalise torukraavi profiilis u 4 m sügavune ja vähemalt 15 m laiune kinni aetud vallikraav ligikaudu 7 meetri kaugusel klausuurist. Avastuse järgi võib oletada, et keskajal piirnes klausuuri idatiib kitsa, u 7 m laiuse eeskaitsealaga. Selle võimalike kaitseehitiste kohta andmeid ei saadud. Eeskaitsealale pääses arvatavasti väravakompleksi kaudu (jn 1: 15), mille jäänused avastati suurtükitorni idaküljel 2010.–2011. a välitöödel. Vallikraavi põhjast leiti vähemalt ühe ruumi ja trepiga kivist hoone jäänus (jn 1: 16). Selle hävingut võib oletamisi seostada 1766. aastal toimunud põlenguga. Tolleaegne omanik, Thomas von Ramm on tules hävinud hoonete hulgas nimetanud maja vallikraavi põhjas. Tõenäoliselt täideti ka vallikraav lõplikult pärast 1766. aasta põlengut.

Enamiku keldriruumide põrandat süvendati mõnekümne sentimeetri võrra. Selle töö käigus puhastati välja ja uuriti mitmeid enamasti 19. sajandil laotud põrandaid (jn 2). Need on laotud nii paest kui ka erineva kujuga telliskividest, sealhulgas ruudukujulistest keraamilistest põrandaplaatidest, millest osa võib pärineda kloostri ajast. Mõne ruumi vabakujulistest paeplaatidest põrandas dokumenteeriti ka puidust vaheseinte jäljed. Põrandate hiline ehitusaeg näitab, et keldriruume kasutati intensiivselt veel 19. sajandil, ilmselt laoruumidena.

Keldritest väärib enim tähelepanu kiriku idaosa alla rajatud kelderkabel ehk krüpt, kust leiti kahe u 2 × 1,37 m suuruse kivialtari vundamendid (jn 3: 1). Altarite mõõdud klapivad peaaegu täpselt naabruses, Väike-Pakri saarel II maailmasõjani seisnud puukabeli keskaegse altariplaadiga. Avastus kinnitab varasemat oletust, et Väike-Pakri kabeli altariplaat paiknes algselt Padise kloostris. Dokumenteeriti ka kahe altari vahel kuni 20. sajandi keskpaigani asunud sekundaarse vaheseina vundament (jn 3: 2). Ei ole võimatu, et sein pärines algsel kujul kloostriajast, eraldades kahe altari ümbruse kabeliteks. Krüpti põranda alt avastati üks ilma hauakastita inimluustik, kuid seda lähemalt ei uuritud (jn 3: 3).

Peakorrusel saadi kõige tähelepanuväärsemaid tulemusi kiriku põranda uurimisel (jn 4–6). Varem oli teada, et 1622. aastal endise kloostrivalduse omanikeks saanud von Rammide ajal oli kirik vaheseinte ja laega jaotatud paljudeks ruumideks. Puhastati välja ja dokumenteeriti kahe vaheseina, mantelkorstna,

keldritrepi, kahe kahhelahju vundamendi ja mitmete põrandate jäänused (jn 4: 9–13; 5). Kõige tähelepanuväärsem säilinud põrand paikneb kiriku läänevõlvikus ja koosneb 53 × 53 cm suurustest diagonaalis asetatud paeplaatidest (jn 4: 12; 5). Selgus, et see on koos külgneva vaheseinaga tõenäoliselt vanem kui von Rammide ajastu. Põranda ladumisel segu sisse sattunud 16. sajandi II poole münt osutab, et tõenäoliselt ehitati see juba 16. sajandi lõpupoolel, Rootsi kuningamõisa ajajärgul. Läänevõlviku vaheseina ja põranda varase dateeringu alusel saab oletada, et kloostrikiriku avarus kaotati järk-järgult: alguses muudeti eluruumideks vaid selle läänevõlvik, kuid ülejäänud mahus jäi kirik esialgu püsima.

Ootuspäraselt leiti idaakna lähedalt peaaltari u 1,8 \times 2,6 m suurune vundament (jn 4: 6; 6). Üllatusena avastati idavõlvikus kolm paekividest laotud keskaegset hauakasti (jn 4: 7; 6). Kivist hauakastid olid kirikutes hilisel keskajal ja varasel uusajal tavapärased, kuid Padise omad on unikaalsed selle poolest, et need ei ole ehitatud maa sisse, vaid kelderkabeli võlvide peale. Kolm kasti on ehitatud ainsatesse tehniliselt võimalikesse kohtadesse – krüpti külgmiste võlvikandade ja keskpiilari kohale. Mujal ulatuvad krüpti võlvid peaaegu kiriku põrandani ning ruumi pole piisavalt. Võib oletada, et hauakastidesse maeti mõni silmapaistvam kloostri juht - abt - või mõni tähtsam annetaja, kuid maetute jäänuseid ei leitud. Keskmisest hauakastist leiti ka üks keskaegse klaaspeekri servakatke (jn 8: 3).

Lisaks rikkalikule varauusaegsele, nn mõisaperioodi leiumaterjalile saadi ka paarkümmend kloostri ajast pärit kivikeraamiliste Siegburgi ja Waldenburgi kannude kildu 14. sajandi II poolest ja 15.–16. sajandist. Enamik neist leiti peakorruse ruumide põranda alusest liivast, mis on ilmselt juba keskajal toodud keldriruumide võlvide katmiseks. Kloostriaegseid esemeleide oli varemest seni kokku leitud vaid paarkümmend. Nagu ka varasematel uuringutel, moodustas keraamilise leiumaterjali enamiku hilisem, varauusaegne materjal: glasuuritud graapenid, maalitud kausid, maalitud fajanss, savipiibud, maalitud portselan, Duingeni kivikeraamika ning mineraalveepudelid. Uudiseks on mõned Westerwaldi nõude killud.

Kelderkabelist ja kiriku idaosast saadi samasuguseid kolme erinevat tooni glasuuritud põrandaplaatide kilde, nagu ka varasematel uuringutel. Tulemus toetab oletust, et kloostris kasutati neid vaid altarite ümbruse katmiseks. Suures koguses leiti mitmesuguste varauusaegsete ahiude kahlite kilde (in 7). Arvatavasti pärinevad need enamasti peakorrusel paiknenud ahjudest. Kirikus ja idatiivas leiti ka mõnede ahjude vundamendid. Kahlikildude hulgas on varaseid, 17. sajandist pärit musta ja rohelise glasuuriga renessanss-stiilis kahleid, kuid enamiku moodustavad hilisemad, 17.-18. sajandist pärit mitmesuguste barokkstiilis kahlite killud. Leiukohad ahjude vundamentide läheduses võimaldavad tulevikus konkreetsete ahjude väljanägemist mingil määral rekonstrueerida.

Kokku leiti paarkümmend münti, neist enamik varauusaegsed vaskrahad. Vanimaks osutusid kaks kirikust leitud Saksa ordu nimel Tallinnas 14. sajandi lõpul või 15. sajandi algusveerandil löödud seestlingut. Kuna nende kasutamine lõppes 1422/1426. aasta rahareformiga ning praeguse uurimisseisu järgi ei valminud kirik enne 15. sajandi keskpaika, siis on neid raske seostada kirikus kasutamisega. Raudleidudest väärib tähelepanu ühest idatiiva keldrist leitud kollektsioon varauusaegseid akna- ja uksedetaile ning tööriistu, millel on tugevad tulekahjustused. Arvatavasti pärinevad need 1766. aasta tulekahjust.

Ligikaudu tuhandest klaasikillust enamik pärineb varauusajast. Väheste keskaegsete leidude hulgas väärivad tähelepanu 14.-15. sajandi peekrite põhja ja serva kild, samuti ühe ribipeekri külje kild (jn 8). Varasest mõisa ajajärgust pärineb suur kogus tahmaseid ja tule jälgedega aknaklaasi kilde, mida võib seostada 1766. aasta tulekahjuga. Enamasti on tegemist töötlemata servaga tahvelklaasiga. Osa neist on retušeeritud servaga tinaraami sisse paigaldamiseks. Varauusaegsetest klaasnõudest saab esile tõsta mõnda kandilise pudeli kildu ja röömeri peekri põhja. Kiriku alustest keldritest leiti suures koguses 19. sajandi keskpaigast pärit silindrikujuliste pudelite kilde, sh nelja Eesti klaasivabriku pudelimärgiga kilde (jn 9). Leidmise asjaolud osutavad, et pudelikillud ei ole keldrisse veetud prügina, vaid tegemist oli mõisa joogilaoga.