research and restoration
season 2012
Report on research and restoration activities

Season 2012

• Research and excavation in al-Qasr.
• Conservation, restoration and reconstruction of private houses in al-Qasr.

In its eleventh season, the activities of the Qasr Dakhleh Project (QDP) focused especially on the excavation of the area northeast of the ruined old mosque. At the same time plastering of as yet unplastered parts of the restored houses in the Shihabyya quarter continued and necessary maintenance work was carried out, as well as other partial studies.

Although the application was made already in July 2012 and the approval of the Permanent Committee was issued on the second of November 2011 there were delays with the issuing of the security clearances. Thus the field activities of the 2012 season could only begin on the 14th of February 2012. The waiting time was used for study. Another problem concerned the fact the QDP was prevented from carrying out the necessary maintenance of the reconstructed Bayt al-Qurashi.

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As in the previous seasons, the activities of the 2012 season of the QDP were subdivided into the two distinct, but not completely separate parts of research and restoration/reconstruction.

Research.
The 2012 archaeological field season of the QDP at al-Qasr began on February 14th and finished on February 29th 2012. However, the study and documentation of of earlier excavated ceramic material started already on the 8th. The excavations, as well as the study and documentation of the ceramics were executed by the archaeologists Paul Kucera and Maia Matkowski.
Verena Leemhuis-Obrecht continued the re-photographing of the documents found in previous seasons. Manfred Woidich continued his linguistic studies.

The reports on the archaeological field activities and investigations of Paul Kucera and Maia Matkowski are as follows:

**Ceramic material from Trench 4.**

Prior to the commencement of excavations at al-Qasr, five days were spent in the Dakhleh Oasis Project (DOP) House at Ayn al-Gindi, drawing and documenting diagnostic ceramics from Trench 4. This material derived from units 40–51, which were excavated as part of the continuation of Trench 4 during the field season of 2010. To briefly summarise, a portion of the west perimeter wall of the Roman *castrum* was revealed in this trench. The excavations conducted that year exposed the foundations of the wall and, importantly, provided us with secure and very informative stratigraphy.

The aim of our documentation of the ceramic material from this trench is to produce detailed illustrations of all diagnostic pieces and generate a ceramic record containing dimensional and fabric/ware data. Part of this record has already been developed by the author for units 19–37 of Trench 4. Additionally, the record includes select Roman types from other areas of al-Qasr that have been collected over the past few years. It is still very much in its formative stage, but it is expected that this record and the associated illustrations will soon allow for a thorough study of the ceramic forms and provide the basis of a typology for the Roman and late Roman periods at al-Qasr. Moreover, the diagnostic ceramics from these particular units will assist in dating the construction of the Roman *castrum*. The expanding ceramic corpus from al-Qasr will be initially compared to those of Ismant el-Kharab (ancient Kellis) and Mut el-Kharab (ancient Mothis) for datable parallels. Following this, other well-established assemblages will be consulted for similarities and/or parallels. All of the ceramic material is identified in accordance with the DOP’s fabric and ware classification system, using a 10x magnification loupe.

Approximately 50–60% of the documentation of the diagnostic material that has been selected from units 40–51 was completed in 2012. A preliminary examination of each of the units indicated that almost all of the material, including non-diagnostic pieces, can be ascribed to a late Roman date with the exception of a couple of apparently intrusive early Arab period diagnostics. It is probable that a few of the diagnostic pieces are of early Roman and Ptolemaic dates, however, these require further analysis. The total weight of the ceramic material obtained from Trench 4 was 270 kg, the bulk of which dates from the Arab period to the modern era. This material has not yet
been processed as it must be subjected to a thorough reduction method before recording can proceed due to the sheer quantity of material. The total weight of ceramics from the units containing homogeneous material of the Roman period, from which the diagnostics that have been documented and those still awaiting documentation derive is 65 kg. This represents about one quarter of the material from Trench 4. Approximately 8 kg of this Roman material is diagnostic.

Overall, the forms that are represented in the assemblage are domestic vessels such as bowls, dishes, jars, water kegs, mixing bowls and cooking pots. Fragments of pigeon-nesting pots were also noted. The majority of the ceramics examined, as well as those recorded, were manufactured with iron-rich fabrics that are typical of the oasis. Of these, many examples of the A11 fabric, a fine, densely-bodied and predominantly thin clay, were noted, which is well-attested as a clay that was in use from the late third to the second half of the fourth century CE. Several examples of calcium-rich fabrics were also observed, some of which are indicators of dates between the third and fourth centuries. Egyptian imitations of late Roman wares, the copies of North African Red Slip wares, were also present amongst the ceramics examined. Those identified belong to the O ware and K ware groups. O ware was only produced in the Nile Valley while K ware was produced more broadly in Egypt. The examples of K ware in the ceramic assemblage from Trench 4 were predominantly local oasis productions. These wares and their forms are usually indicative of dates that range between the fourth and sixth centuries, though in some cases they can date up to the eighth century. However, the majority of the forms and types of ware that were present amongst the material studied from units 40–51, do not belong to these imitation groups. This portion of the Roman period material generally dates to the third and fourth centuries.

During the course of examining the ceramics from the trench an important insight was gained. The material that originates from the units which were associated with the foundation levels of the castrum wall seems datable to the third-century and perhaps slightly earlier. There is an absence of very typical fourth-century forms and later forms from these units, and this suggests it is likely that the construction of the castrum took place prior to this time. A late third-century date is certainly befitting in light of the suggested construction dates of other late Roman forts in Kharga and Bahariyya oases to this time. Nonetheless, documentation of the full assemblage of diagnostics obtained from the continuation of Trench 4 must be completed before further certainty on the dating of the castrum can be proposed. It is expected that progress on the ceramic corpus with special attention to the Roman period material will continue in the following field season.

PK
The inscribed water keg (Object No. O.12.001; Registration No. M5-2/0/1)

At the commencement of excavations at al-Qasr (15th February), whilst preparing the area where Trench 7 is located, a large fragment of a ceramic vessel was spotted partially embedded in exposed strata on the west side of the path which lies just west of the old mosque (Figure 1). Initially it was thought that this might be a piece from an imported amphora and worthy of closer inspection as the fabric could not be readily identified. The layer in which the sherd was situated is also of particular interest as it is the first containing cultural material that is positioned directly above the basal clay (tafl). This area with the exposed strata is significantly disturbed and it is difficult to determine whether the stratum concerned has deflated and slumped or if it is in its original position. The former case is plausible as the basal clay is heavily eroded here and it also appears that tafl is partially intermixed with the cultural layer. The strata above this layer is missing, yet just up from this place there is much better preserved stratigraphy that likely represents what once covered the area. An equivalent cultural layer may also be seen in this stratigraphical record. All of these layers are visible just above and to the north side of the castrum’s south wall foundation with approximately 2.5 m between the base level of the foundation and the well-preserved cultural layers. This is an area which will hopefully be investigated further next season.

1. Stratigraphical record and location of the inscribed water keg.
After photographing its position and documenting the characteristics of the stratigraphy, the sherd was removed. It is the top section of a water keg with the neck and rim intact, and which bears a potter’s mark across the upper body (Figures 2–4). The inscription is written in Greek and the following letters are legible: kost | me (the sigma is written in the form of ‘c’). The first part of the inscription is possibly truncated, but it is not clear what the long vertical stroke following this symbolises, or why two of the letters are very small by comparison and significantly offset from the rest of the script. The vertical stroke may be a diacritical mark and it is possible that the inscription is that of a numerical fraction or an ordinal number such as ‘20th’ (e., kost); perhaps a reference to the contents it once held. Unfortunately, no more of the inscribed body could be located to confirm this hypothesis. The keg may be tentatively dated to the fourth century CE, based on similar examples of this type of short-necked water keg from Kellis. Its fabric is yet to be determined, but it may be a type of clay from Kharga Oasis. Further analysis and study of comparative ceramic material is necessary to clarify this matter. Nevertheless, this object welcomes some excitement for the QDP. It is the first of its kind to have been found at al-Qasr by our team and also represents the first Greek inscription from the site according to our knowledge. Potentially, this area of al-Qasr will yield more artefacts of similar interest and importance to understanding the early phases of its history.

1. Object M5-2/0/1 (O.12.001)
3. Illustrations of Object M5-2/0/1 (P. Kucera)

4. Detail of the inscription.

Excavations north of the ancient mosque to the east of the Shihabiyya quarter.

In 2010 two small trenches were opened in the area of the ancient mosque east of the Shihabiyya quarter: the first (trench 5) is situated to the northwest of the mosque adjacent to the tower/minaret and the second (trench 6) inside the mosque. In 2012 we decided to continue our investigations around this mosque and open a new trench to the northeast of this building. This trench of 4 to 7 m from north to south and 7 to 8 m
from east to west is in the south adjacent to the northern wall of the mosque, in the west to the enclosure wall, which is oriented north-south and in the north part of it borders on the walls of a modern house (house 1) and the adjacent rooms thereof (room 1 and 2).

The objective of this excavation was on the one hand to have more information concerning the ancient mosque and the chronology of its construction. In 2010 we brought to light a segment of a mud brick wall running parallel to the tower/minaret and we surmised that it belonged to the enclosure of the northern ziyada of the mosque or that it were the remains of an earlier part of its construction. To the west this wall is cut by the digging out of the modern trench at the course of the old outlet of the well. To the east it goes in the direction of trench 7, the excavation of which in the 2012 season could possibly produce additional elements.

On the other hand, our attention was particularly turned to the perimeter of the Roman castrum, which has partially been identified and documented by earlier excavations, by the QDP. A mass of mud brick higher than 4 m is visible to the east of the mihrab: this is the southeastern corner of the enclosure of the Roman castrum. The Roman wall goes in a southwestern direction where the enclosure walls of the southern

![General plan of the mosque, of the modern house and its adjacent rooms as well as the remaining portion of the Roman wall to the east of the mihrab.](image-url)
ziyada merge with the Roman mud brick. It then goes in a northwestern direction and we surmised to find a part of its foundation at the bottom of the new trench 7

**Trench 7**

After having cleaned the surface of the area of the excavation, the first occupation levels turned out to correspond to a brown pulverulent sedimentary deposit with numerous inclusions of vegetable fibres of palm and modern intrusions of plastic, fragments of material, animal bones and a lot of contemporary ceramic sherds. On this level of rubbish we have not collected the ceramics (ceramic waste).

Very quickly, built remains appeared in the northeastern corner of the trench. Against the modern house and its adjacent rooms there is a small semicircular structure (context 2) with wall sections standing against rooms 1 and 2. It is made of small mud bricks (9 x 7 x 21) and arranged in regular courses with a presence of broken limestone rubble in the masonry. The structure is filled in with a sandy deposit with numerous intrusions of plastic, suggesting that it is modern. But its poor state of conservation makes it impossible to know its exact function. The foundations of the structure are on the same level as those of the modern house 1 and it becomes clear that they both rest on a mass of mud brick of which the large dimensions (16 x 9 x 34) are similar to those of the Roman wall. These bricks are visible inside the circular structure (context 4) under its modern filling, as well as on the outside (context 22), to the west under a compact layer of clay (context 15) with inclusions of fragments of brick and limestone blocs. This mass of mud brick clearly corresponds to the base of the wall of the Roman castrum. It may be even part of its foundations. The limit of the facade becomes apparent on the level of the context 22 and its alignment is in keeping with the preserved Roman wall which rises to the east of the trench and the mosque (see Figure 8)

The modern circular structure (context 2) also seems to be built on a base made of mud brick sticking out from underneath it (context 7). It leans on the western side against the remains of the Roman wall (context 22) and seems at the eastern side to be joined to the base of the southern wall of room 2.

To the west of the line of the facade of the Roman wall (context 22) it has probably fallen over and we identified a pocket of fused mud bricks (context 27). The demolition layer was covered with a level of sand (context 26) with inclusions of ash, small stones and fragments of bricks originating from an east/western wall segment (context 24) based on the fused clay. This badly preserved wall fragment is almost
6. Overview of the modern structures and the mass of mud bricks of the Roman wall, located at the northeast of the sector.

2,20 m long and is 0,12 to 0,57 m wide with a height of 0,24 to 0,37 m. It is aligned with the base of the southern facade of room 2. The foundations of room 2 are much deeper than those of the modern house and its adjacent room 1, proof of a different chronology. Even if room 2 was rebuilt recently, its older foundations are joined to the segment of the wall 24. We hypothesize the existence of an ancient structure, probably datable to the Islamic period with a possible relation to the ancient mosque.

The demolition pocket of mud bricks originating from the Roman wall sits on the natural geological ground (context 20): the compact red tafel characteristic of this part of the oasis and on which most of the ancient and more recent houses of Al-Qasr are founded. This geological level marks an important natural dip to the west that is found also much lower against the tower/minaret (see trench 5 of 2010).

In the south, the natural tafel is intersected by the foundation trench of the north wall of the mosque (context 33). This trench is 0,45 m wide and 0,30 m deep and is filled with sand (context 34) with inclusions of fragments of the tafel of the natural geological soil, but also of mud brick and lots of vegetable palm fibres. The excavation made it possible to bring to light the last circulation level of the mosque (context 19)
directly against the facade on the level of the plaster consisting of a coating of earth. Under this circulation level of indurated compact clay with numerous fragments of mud brick, the construction of the northern wall of the mosque is visible. These are mud bricks, arranged on 5 levels of regular courses (context 35), which are built on a foundation of hewn stone of medium size (context 36) arranged in two layers.

To the southeast of the built structures 2, 7, 24, the natural tafil is intersected by the digging of a large dumping pit (context 37-39). This deep pit is filled with a level of sand with inclusions of pockets of ash and fragments of bricks and sherds of limestone. It reveals the foundation of wall 24, which shows no intersection with the south wall of room 2. The presence of a line of compact clay (context 38), oriented north/south, can be noted. To the West it delimits the geological natural ground and to the East a big man-made depression (context 40). This depression was filled up with a pocket of sand with numerous inclusions of fragments of bricks and sherds of limestone. It is probably related to the digging of the foundation trench of the Roman enclosure that can be found on the other side of the north/south enclosure wall, which delimits the eastern side of the trench. Due to lack of time we could not finish the excavation to the East of the trench. We will have to wait for the 2013 season to conclude the excavation and to complete the archaeological data.

After the excavation season the area was covered with plastic sheeting and clean yellow sand to preserve the state of the excavation.
**Conclusion**

During the excavation season of 2012, the opening of the trench nr 7 to the northeast of the ancien mosque permitted the completion of the documentation of the enclosure in mud brick of the Roman castrum. In the northeastern corner of the trench, under modern structures, we have indeed found a mass of mud brick corresponding to the base of the Roman enclosure wall or its foundation. Part of the bricks had fallen to the west, thus forming a pocket of fused clay on top of the natural tafl. To the east, this geological level is intersected by a big pit and a dip, which belong undoubtedly to the foundation trench of the Roman wall. However, the next season will have to be waited for in order to complete the data, as the excavation could not be finished.

On the clay pocket caused by the demolition of the Roman wall, the foundations of a mud brick wall running east to west was found. It is a continuation of the foundation of the southern wall of room 2. This segment of the wall, the foundations of which are much deeper than those of the modern house 1 and its adjacent room 1 is evidence of the existence of a probably Islamic structure which could be related to the ancient mosque. In 2010 we had found a wall running from east to west belonging to the northern ziyada of the mosque and we had expected to find it on the level of trench 7. It is highly unlikely that the east-western wall uncovered in trench 7 is part of the enclosure wall of the ziyada. The wall of trench 5 was founded on hewn stone of medium size, which does not appear here.

The 2013 excavation season will make it possible to complete the archaeological data to the east of trench 7 and a new area of excavations will be opened again on the perimeter of the mosque.

MM
8. General plan of trench 7 and location line of the mud brick wall of the Roman castrum.
9. General view of the old mosque and the Roman wall.

10. Demarcation of trench 7 prior to excavation.
11. Trench 7: contexts 14 and 20 seen from the west.

12. Trench 7: context 27: fused mud bricks of the Roman wall fallen over on the natural red tafl.

15. Trench 7: verview of northeast corner of the trench (contexts 2, 4, 7, 22, 24, 27).
16. Trench 7: upside-down ceramic vessel in situ, northeast corner area, facing north.

Restoration and reconstruction.

Conservation, restoration and reconstruction of the Shihabiyya quarter and surroundings.

After the completion of the restoration and reconstruction of the five houses of the south-western part of the Shihabiyya quarter it was decided not to continue with restoration and reconstruction work in al-Qasr as long as no decision has been taken about the use of these houses. As these houses always have been places to live in they should preferably be used for that function again. They are fit to be used as such, because in accordance with the decision of the Permanent Committee of 18 September 2008 electrical wiring and water pipes and sewage drains have been installed. But whatever function they get, it is important to note that if these houses have no viable function and are not used in a sensible way, they will most probably slowly fall to pieces again and the entire restoration will have been in vain. Maintenance of these unique houses should be performed regularly, so that major maintenance problems can be avoided. Inhabitants of such houses are well placed to cope with small mainte-
nance issues before they become big. In the 2012 season the QDP has started to perform this neglected maintenance task.

Most of the maintenance concerned small issues. In many places small cracks had appeared. This is a natural phenomenon in new mud brick structures, because the settling of the mud brick takes time. All these small cracks and fissures were mended in the traditional way. Once their mud is dry they will be plastered over.

17. Mending of small cracks and fissures.

A serious problem was encountered concerning the eastern wall of Bayt al-Qadi, which was restored from 2003 till 2005. A large crack from top to bottom was beginning to widen. To counter this and reinforce the connection large horizontal wooden straps were mounted into the wall.

18. Repair of the large crack in the eastern wall of Bayt al-Qadi.
We were prevented to do maintenance work in Bayt al-Qurashi by Mr. Ahmad Salim, the general director for Islamic and Coptic Antiquities of the SCA in the New Valley. He has rented the house and repeated requests, including from Mr. Mohammed Abd al-Rasul, General Director for Islamic and Coptic Antiquities of Middle Egypt, and Mr. Kamil Bayyumi, director for Coptic and Islamic Antiquities of the SCA for West Dakhla, to give the QDP access to Bayt al-Qurashi for maintenance were not successful. This is a very regrettable and worrisome situation and the more bewildering, because the QDP has reconstructed the totally ruined Bayt al-Qurashi according to the decisions of the Permanent Committee and, as far as is known, ownership has not been officially established.

Apart from maintenance work there is one task that has not been completed. The plastering of the outside of some of the restored houses is not yet completed. This season the northern wall of Bayt al-Qadi was plastered.

19. Plastering of the northern wall of Bayt al-Qadi.
In the 2012 season, which lasted from 8 February till 8 March, the QDP team consisted of Dr. Paul Kucera (8 - 24 February), Mrs. Verena Leemhuis-Obrecht (26 February – 8 March), Prof. Dr. Frederik Leemhuis (8 February – 8 March), Mrs. Maia Matkowski MA (8 - 29 February) and Prof. Dr. Manfred Woidich (26 February – 8 March).

The activities with respect to restoration, reconstruction and excavation were executed with the help of and in close cooperation with the local collaborators of the QDP-team. These local collaborators consisted in 2010 of some 25 workmen from al-Qasr and surroundings. Many of those have worked with the project for many seasons and have become very experienced. Their restoration and reconstruction work was executed in cooperation with the master craftsman Mr. `Abd-al-Ghaffar Mohammed, and the excavation team was overseen by Mr. Mohammed Mahdi Sabir, who both have been with the project for a long time and whose experience has been crucial.

The supervision of the restoration and maintenance activities was entrusted to Mr. Yasir Sayyid Ali, who has been working with the project before. As in all previous seasons we could again profit from the advise of the experienced and indispensable Mr. Rizq Abdalhay Ahmad, director of restoration for Islamic Antiquities of the SCA in Dakhla. His knowledge of traditional expertise and its local availability have remained invaluable for the project also in this (provisionally) last stage of the restoration activities. The cooperation of both Mr. Rizq Abdalhay Ahmad and Mr. Yasir Sayyid Ali is gratefully acknowledged.

The supervising inspector of the SCA was Mr. Ahmad 'Abdallah Sa'id. We gratefully acknowledge his collaboration in a spirit of good cooperation. The QDP expresses its gratitude for the encouragement and assistance of Mr. Kamil Bayyumi, director for Coptic and Islamic Antiquities of the SCA for West Dakhla. The involvement of the general director for Islamic and Coptic Antiquities of the SCA in the New Valley, Mr. Ahmad Salim, is duly recognised.

As in previous years the QDP is greatly indebted to Mr. Mohammed Abd al-Rasul, General Director for Islamic and Coptic Antiquities of Middle Egypt, for his advice, interest and help in the project.

The QDP owes much gratitude to the various above-mentioned people. Their support and interest and especially the dedication of the local collaborators of the team has made that the work of this season has again been such an interesting and enjoyable experience even though it was rather short.

Groningen, 31 August 2012

Fred Leemhuis
Field director QDP