



UNIVERSITY
OF WARSAW | Polish Centre of
Mediterranean Archaeology



Title: Tell el-Murra (Northeastern Nile Delta survey) seasons 2012–2013

Author(s) : Mariusz A. Jucha, Grzegorz Bąk-Pryc, Natalia Małecka-Drozd

Journal: *Polish Archaeology in the Mediterranean* 24/1 (Research)

Year: 2015

Pages: 199 - 214

ISSN 1234–5415 (Print), ISSN 2083–537X (Online)

**Publisher: Polish Centre of Mediterranean Archaeology, University of Warsaw (PCMA UW),
Wydawnictwa Uniwersytetu Warszawskiego (WUW)**

www.pcma.uw.edu.pl www.wuw.edu.pl

Abstract: Excavations of the site of Tell el-Murra in the northeastern part of the Nile Delta in 2012 and 2013, following up on surveys in 2008 and in 2010–2011, uncovered settlement structures from the Old Kingdom in the northeastern part of the site (trench T5). Excavations in the adjacent cemetery (trench S3) cleared more graves, which were dated to the Early Dynastic period based on pottery and stone vessel evidence.

Keywords: Tell el-Murra, Egypt, Nile Delta, Predynastic, Early Dynastic, Old Kingdom, cemetery, settlement

تل المرة (الدراسة الاستقصائية لشمال شرق دلتا النيل)

Mariusz A. Jucha, Grzegorz Bąk-Pryc, Natalia Małecka-Drozd

الملخص: الحفريات في موقع تل المرة في الجزء الشمالي الشرقي من دلتا النيل في 2012 و 2013 تبعت عمليات المسح في 2008 و 2010-2011 , وكشفت عن هياكل مستوطنة من الدولة القديمة في الجزء الشمالي الشرقي لموقع (الخندق 5T) . الحفريات في المقبرة المجاورة (للخندق 3.S) أظهرت المزيد من المقابر التي تعود إلى عصر الأسرات المبكر بناءً على الأدلة من الأواني الفخارية والحجرية.

POLISH ARCHAEOLOGY IN THE MEDITERRANEAN (PAM)
Annual of the Polish Centre of Mediterranean Archaeology, University of Warsaw

Editorial Board

Piotr Bieliński
Krzysztof M. Ciałowicz
Wiktor Andrzej Daszewski
Michał Gawlikowski
Włodzimierz Godlewski
Karol Myśliwiec
Tomasz Waliszewski

International Advisory Board

Jean Charles Balty
Charles Bonnet
Giorgio Buccellati
Stan Hendrickx
Johanna Hlaubek

Peer-reviewed by members of the *PAM* committee of independent reviewers.
<http://www.pcma.uw.edu.pl/en/pam-journal/pam-independent-reviewers/>

POLISH CENTRE OF MEDITERRANEAN ARCHAEOLOGY
UNIVERSITY OF WARSAW

POLISH ARCHAEOLOGY IN THE MEDITERRANEAN

XXIV/1

RESEARCH



ABBREVIATIONS

<i>AA</i>	<i>Archäologischer Anzeiger; Jahrbuch des Deutschen Archäologischen Instituts</i> (Berlin)
<i>ANM</i>	<i>Archéologie du Nil Moyen</i> (Lille)
<i>ASAE</i>	<i>Annales du Service des Antiquités de l'Égypte</i> (Cairo)
<i>AV</i>	<i>Archäologische Veröffentlichungen, Deutsches Archäologisches Institut, Abteilung Kairo</i> (Berlin–Mainz am Rhein)
<i>BAAL</i>	<i>Bulletin d'archéologie et d'architecture libanaises</i> (Beirut)
<i>BAH</i>	<i>Bibliothèque archéologique et historique</i> (Paris)
<i>BAR IS</i>	<i>British Archaeology Reports International Series</i> (Oxford)
<i>BASOR</i>	<i>Bulletin of the American Schools of Oriental Research</i> (Ann Arbor, MI)
<i>BCH</i>	<i>Bulletin de correspondance hellénique</i> (Paris)
<i>BdE</i>	<i>Bibliothèque d'étude</i> (Cairo)
<i>BIFAO</i>	<i>Bulletin de l'Institut français d'archéologie orientale</i> (Cairo)
<i>BSAA</i>	<i>Bulletin de la Société d'archéologie d'Alexandrie</i> (Cairo)
<i>BSFE</i>	<i>Bulletin de la Société française d'égyptologie</i> (Paris)
<i>CCE</i>	<i>Cahiers de la céramique égyptienne</i> (Cairo)
<i>EtTrav</i>	<i>Études et travaux. Travaux du Centre d'archéologie méditerranéenne de l'Académie des sciences polonaise</i> (Warsaw)
<i>FIFAO</i>	<i>Fouilles de l'Institut français d'archéologie orientale</i> (Cairo)
<i>GAMAR</i>	<i>Gdańsk Archaeological Museum African Reports</i> (Gdańsk)
<i>GM</i>	<i>Göttinger Miszellen</i> (Göttingen)
<i>IAMS</i>	<i>Institute of Archaeo-Metallurgical Studies</i> (London)
<i>JARCE</i>	<i>Journal of the American Research Center in Egypt</i> (Boston–Princeton–New York–Cairo)
<i>JEA</i>	<i>Journal of Egyptian Archaeology</i> (London)
<i>JGS</i>	<i>Journal of Glass Studies</i> (Corning, NY)
<i>JJP</i>	<i>Journal of Juristic Papyrology</i> (Warsaw)
<i>JRS</i>	<i>Journal of Roman Studies</i> (London)
<i>MDAIK</i>	<i>Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo</i> (Wiesbaden)
<i>OIP</i>	<i>Oriental Institute Publications</i> (Chicago)
<i>OLA</i>	<i>Orientalia lovaniensia analecta</i> (Louvain)
<i>PAM</i>	<i>Polish Archaeology in the Mediterranean</i> (Warsaw)
<i>PSAS</i>	<i>Proceedings of the Seminar for Arabian Studies</i> (London)
<i>SAAC</i>	<i>Studies in Ancient Art and Civilisation</i> (Kraków)
<i>SAK</i>	<i>Studien zur altägyptischen Kultur</i> (Hamburg)
<i>SAOC</i>	<i>Studies in Ancient Oriental Civilization</i> (Chicago)
<i>WVDOG</i>	<i>Wissenschaftliche Veröffentlichungen der deutschen Orient-Gesellschaft</i> (Berlin–Leipzig)

TELL EL-MURRA (NORTHEASTERN NILE DELTA SURVEY) SEASONS 2012–2013

Mariusz A. Jucha,¹ Grzegorz Bąk-Pryc,² Natalia Małecka-Drozd³

^{1,2,3} Institute of Archaeology, Jagiellonian University in Kraków

Abstract: Excavations of the site of Tell el-Murra in the northeastern part of the Nile Delta in 2012 and 2013, following up on surveys in 2008 and in 2010–2011, uncovered settlement structures from the Old Kingdom in the northeastern part of the site (trench T5). Excavations in the adjacent cemetery (trench S3) cleared more graves, which were dated to the Early Dynastic period based on pottery and stone vessel evidence.

Keywords: Tell el-Murra, Egypt, Nile Delta, Predynastic, Early Dynastic, Old Kingdom, cemetery, settlement

Tell el-Murra in the northeastern part of the Nile Delta (Jucha et al. 2013: Fig. 1), about 100 km northeast of Cairo and 1 km to the south of the modern village of Abu Umran, has been excavated regularly since 2012 by a Polish team from the Jagiellonian University in Kraków, working under the aegis of the Polish Centre of Mediterranean Archaeology, University of Warsaw. The site was first surveyed in 2008 and 2010–2011 when geophysical prospection and geological core drillings were carried out. Test trenches S1, S2, S3 and S4 were also opened (Jucha 2009: 86–88, Figs 40–41; 2010; Jucha and Buszek 2011; Jucha et al. 2013; Jucha, Bąk-Pryc, and Czarnowicz 2014). In the two years reported here the explored area was enlarged and new trenches were opened.

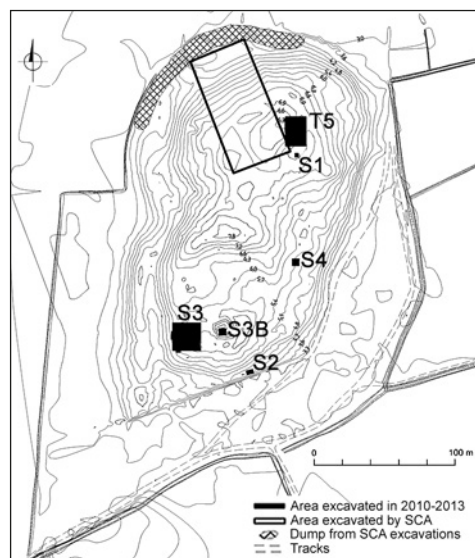


Fig. 1. Plan of Tell el-Murra with the location of trenches (Drawing A. Buszek)

TRENCH S3

Trench S3 in the southwestern part of the tell followed up on the first test trench (3 m by 3 m) opened in 2010 (Jucha et al. 2013: 110–113, Fig. 2). It was enlarged in 2011 to the size 10 m by 11 m (Jucha, Bąk-Pryc, and Czarnowicz 2014: Fig. 1). Excavations involved then primarily the exploration of two graves, Nos 1 and 2, discovered within an area enlarged to the north and west (Jucha, Bąk-Pryc, and Czarnowicz 2014: 141–146, Figs 2–5).

RESEARCH IN 2012

The borders of the original trench were extended to the south, north and east, re-

sulting in a 20 m by 20 m excavation area [Fig. 1]. Exploration of the western part (within the scope of the area explored since 2011) uncovered fragments of two mud-brick walls. The first (S3-59), oriented NE–SW, was slightly curved. On the north, it adjoined the other wall (S3-57), which followed a nearly circular plan [Fig. 2]. The eastern part of the latter was disturbed. A light-colored and cohesive layer that could represent the remains of a destroyed structure of later date (identified as grave 23 in the 2015 season, see Jucha et al. forthcoming) was distinguished there.

Grave 4 was cut into wall S3-59 [Fig. 3 left]. Fragments of stones, irregular

Team

Dates of work: 3 March–12 April 2012; 11 April–15 May 2013

Director: Dr. Mariusz A. Jucha (Institute of Archaeology, Jagiellonian University in Kraków; 2012, 2013); co-director from 2013: Grzegorz Bąk-Pryc, archaeologist (PhD candidate, Institute of Archaeology, Jagiellonian University in Kraków; 2012, 2013)

MSA representatives: Hany Fahim Youssif Mikhael (Faqus SCA Inspectorate; 2012), El Sayed Abdel Shakour Selim (Tanis SCA Inspectorate; 2013)

Archaeologists: Urszula Stępień (PhD candidate, Institute of Archaeology, Jagiellonian University in Kraków; 2012), Natalia Małecka (PhD candidate, Institute of Archaeology, Jagiellonian University in Kraków; 2012, 2013), Kamila Peschel (independent; 2012, 2013)

Archaeologists and ceramologists: Magdalena Kazimierczak, Magdalena Sobas (both PhD candidates, Institute of Archaeology, Jagiellonian University in Kraków; 2012, 2013)

Archaeologist and geophysicist: Artur Buszek (PhD candidate, Institute of Archaeology, Jagiellonian University in Kraków; 2013)

Anthropologist: Anna Kozłowska (PhD candidate, Department of Anthropology, Jagiellonian University in Kraków; 2013)

Documentalists: Aleksandra Siciak (2012, 2013), Adelina Szczerbińska (2012, 2013), Tomasz Wicha (2012), Adriana Drabik (2012), Barbara Zając (2012), Bartłomiej Grzywniak (2012), Maciej Wyżgoł (2012, 2013), Grzegorz Kocharński (2013), Michał Rutkowski (2013) (all Institute of Archaeology, Jagiellonian University in Kraków), Cezary Baka (student, Université Paris-Sorbonne; 2013)

Photographer: Robert Słaboński (freelance; 2012)

Acknowledgments

The research was funded from a grant of the Ministry of Science and Higher Education and the National Science Centre, Poland (No. 2195/B/H03/2009/36).

in shape, were also discovered in the vicinity. The outline of the grave, oriented NW–SE and measuring 1 m by 0.60 m, was identified on Level 14 (altitude 4.90 m). The body of the deceased was placed tightly contracted, lying on the left side, the head to the northwest. The bones were poorly preserved. Burial goods consisted of a few beads that were found close to the body. The remains of an organic mat lining the sides of the grave pit were also traced.

The grave was cut into the northwestern part of another rectangular structure, **grave 3** [Fig. 3], oriented NE–SW and measuring 2.50 m by 2.00 m. The outline of the burial chamber (S3-48) of the latter grave was clearly visible, as it was lined with a mud-brick wall (S3-55). Remains of an organic mat were found covering, among others, a pottery coffin with human bones.

The body was tightly contracted, placed on the left side, the head to the northeast. Burial goods included five ceramic vessels (Kazimierczak 2014a: 102–104, Fig. 1) and one vessel of basalt.

The outline of another small rectangular pit, identified as **grave 5** [Fig. 4], was discovered to the east of grave 3. Its northwestern corner adjoined the east wall of grave 3. It was oriented NW–SE and measured 1.10 m by 0.80 m. The pit held a pottery coffin that had the bottom pierced with numerous holes [Fig. 5]. Inside the coffin were very badly preserved bones belonging to a human skeleton. Their location indicated however that the body of the deceased may have been tightly contracted, laid on the left side, the head to the northwest. Burial goods included two ceramic vessels (Kazimierczak 2014a:



Fig. 2. Trench S3, western part (squares J22A and J22C)
(Photo G. Bąk-Pryc)



Fig. 3. Trench S3: left, graves 3 and 4; right, grave 3
(Photos G. Bąk-Pryc)



Fig. 4. Trench S3, western part (squares J22A and J22C)
(Photo G. Bąk-Pryc)

115, Fig. 6:3–4), two stone vessels, a bone bracelet and a rounded token. The items were placed close to the body, along its eastern side.

The outlines of two other rectangular pits (S3-126 and S3-61), identified as **graves 8** (Jucha et al. forthcoming) and **9** (see below) respectively, were discovered to the east of grave 5 [Figs 4, 8].

Grave 11 was identified to the north of these graves [see Fig. 4]. It was oriented N–S and measured 0.70 m by 0.60 m. The body of the deceased was placed in an oval pit, tightly contracted, on the left side, head to the north. A characteristic feature in this case was a complete lack of burial goods.

The northern sections of trench S3 (in additional squares opened in 2012, on a higher level than the structures described above) were also explored. Layers in the upper levels, heavily disturbed by animal burrowing, included a light-colored cohesive layer with few artifacts, and a dark-

brown, loose layer with a larger number of artifacts and a prevalence of potsherds, animal bones, stone objects and flint tools.

Architectural remains were identified in the northeastern part of the described area [Fig. 6]. These included among others fragments of several walls made of bright yellow, sand-tempered bricks (Spencer 1979: 3; Kemp 2000: 80). A wall (S3-43), oriented NE–SW, was recognized across two squares (K21C and K22A). Its southern part marked the western edge



Fig. 5. Pottery coffin from grave 5 (Photo M.A. Jucha)

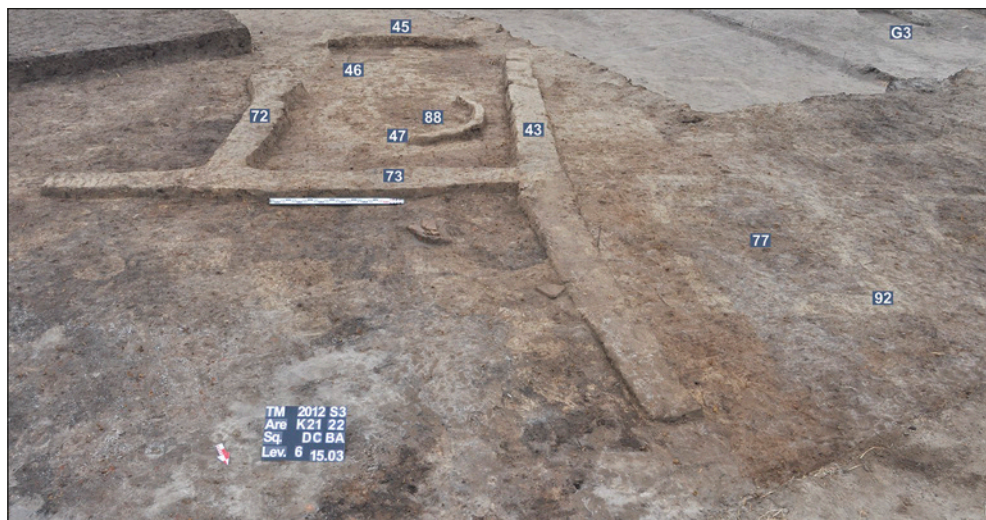


Fig. 6. Trench S3, northeastern part (squares K21C, K21D, K22A and K22B) (Photo G. Bąk-Pryc)

of a rectangular space (S3-46) delimited by a parallel wall on the east (S3-72) and two perpendicular walls, oriented NW–SE, on the north (S3-73) and south (S3-45). A rounded structure (S3-47/S3-88) was located in its northern part.

Deposits of loosely scattered sand-tempered bricks were noted to the north and east. Other rooms could have been located there, but the layout and dimensions could not be traced. Several small rounded structures were also located there. A roughly regular structure (S3-116) was distinguished at the northeastern end of the trench. Potsherds were discovered in that area along with animal bones and parts of stone and flint objects.

Other discoveries included distinctive sand-brick walls (S3-92, S3-93), outlining a rectangular structure, S3-92/S3-77 (pro-

ved in 2015 to be the superstructure of grave 6, see Jucha et al. forthcoming), and S3-93/S3-78 [Fig. 7]. In the course of further research, the latter turned out to be the superstructure of **grave 7**, oriented NE–SW and measuring 2.30 m by 1.40 m. Part of the external wall (S3-93), in particular its eastern section, was ruined and the fill inside the pit located below was partly intermixed. Single fragments of human bones and ceramic vessels were found inside. The two-chambered structure, of external dimensions 1.50 m by 1.00 m, was constructed at the bottom of a pit [Fig. 9 top left]. The pottery coffin, with semi-cylindrical two-part lid was located in the northern chamber. A significant part of the lid was crushed and fell into the coffin. The body of the deceased was placed in tightly contracted position,



Fig. 7. Trench S3, grave 7 (structure S3-93/S3-78) and grave 6 (structure S3-92/S3-77) (Photo G. Bąk-Pryc)

on the left side, the head to the northeast. Inside the coffin, a stone vessel was placed close to the back of the head. The grave goods consisted of five ceramic vessels (Kazimierczak 2014a: 113–115, Fig. 6: 1–2), five stone vessels and a flint knife.

The outline of a round structure (S3-147) was discovered farther to the west of grave 7. It was filled with a loose dark brown layer. A wall (S3-95) adjoined the structure on the southwest and to the south of it, a small-sized brick structure (S3-89) of rectangular shape was discovered.

The outlines of rectangular structures, assumed as burial pits, were discovered to the south of the discussed group of graves 5, 8 and 9. These included among others **grave 12** (explored in 2013, see below). Loose fragments of human bones were found furthermore in the layer between the graves. Diverse archaeological features

were noted at the southern end of the trench, but the outline of structures in most cases was hardly visible. Fragments of several walls and a small rectangular structure (S3-110), later identified as grave 14, were distinguished there.

RESEARCH IN 2013

Investigations in 2013 continued in the western and southern parts of trench S3 [Fig. 8]. Work commenced with the exploration of **grave 12** [Figs 8, 9 top right] from the previous season. The uppermost layer on Level 14 (altitude 4.90 m) was cleaned and the distinct outline of an external wall demarcating the grave was traced. It was oriented N–S and measured 2.20 m by 1.40 m. In the southern part, a crossing wall was observed, dividing the inside of the grave into two chambers. The southern chamber was small-sized. The inner dimensions were 1.10 m by 0.50 m, while the size of the burial chamber was 1.20 m by 0.80 m. The fill of the latter chamber was a homogeneous layer with numerous but slight discoloration marks. Traces of an organic mat were observed. Eleven stone vessels belonging to the grave goods set were found in the eastern part, between the skeleton and the outer wall. Red-colored remains, possibly ochre, were noted during exploration of the skeleton. The bones were poorly preserved. However, diagnostic fragments and the location of bones allowed us to assume that the deceased may have been placed on the left side with the head to the north. The southern chamber yielded altogether four ceramic vessels with traces of an organic mat on their surface.

A concentration (S3-100) of numerous skull fragments was uncovered to the east of the discussed grave. Bone remains lay

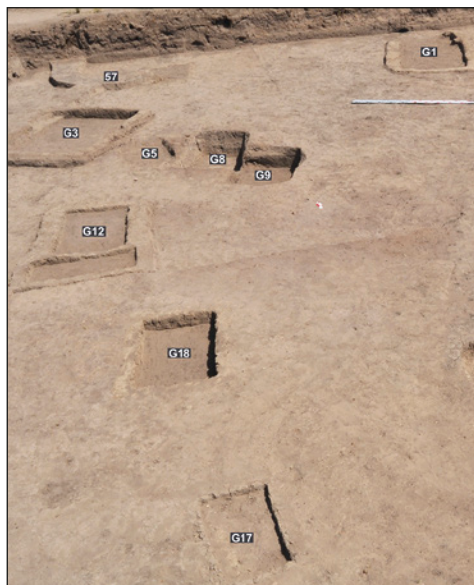


Fig. 8. Location of graves in the western part of trench S3 (squares J22A, J22C, J23A) (Photo G. Bąk-Pryc)



Fig. 9. Graves explored in trench S3: top left, grave 7; top right, grave 12; bottom left, grave 9; bottom right, grave 18 (Photos G. Bąk-Pryc)

inside an oval pit identified as **grave 13**. Its size was 0.90 m by 0.60 m, and it was oriented N–S. The body was placed in tightly contracted position, on the left side, the head to the north. The skeleton was quite poorly preserved. Traces of an organic mat lining the pit and covering the body were revealed. The burial contained no grave goods.

Further graves explored to the north of grave 12 included **grave 9** [*Figs 8, 9* bottom left], discovered already in the 2012 season [see *Fig. 4*]. The size of the grave pit was 1.40 m by 0.90 m; it was oriented NE–SW. Traces of an organic mat lining the pit were noted. The body of the deceased was found in tightly contracted position, on the left side, the head to the northeast. Grave goods comprised two ceramic vessels and a small fragment of a seal impression.

The outline of a shallow pit (**grave 15**), oriented N–S, was discovered further to the north. Its borders were not distinct but its shape was close to an oval, measuring 0.70 m by 0.45 m. The body of the deceased was found in tightly contracted position, on the right side, the head to the south. Traces of an organic mat which may have been used to line the pit and a few potsherds were recorded in the grave.

In the southern part of trench S3, work continued to the south of grave 12 where the upper layers had been examined in the previous season. Level 11 (altitude 5.20 m) was the first to be explored. Structures from the higher levels were observed to continue down. One of these was a rectangular structure (S3-110) oriented N–S, which appeared to be a small-sized burial (**grave 14**). It consisted of a shallow pit measuring 0.60 m by 0.40 m with a mud border on the outside. It contained a body

lying in tightly contracted position on the right side, the head to the south. Burial goods comprised several faience beads found close to the neck of deceased.

The outline of another burial pit (**grave 17**), also with a distinct mud border [see *Fig. 8*], was traced to the south of the above grave. The external dimensions of the pit, which was oriented N–S, were 0.80 m by 0.55 m. The interior was filled with a homogeneous layer of loose composition with numerous discoloration marks. During the exploration, very scarce and poorly preserved remains of human bones, which may have belonged to two persons, were found. There were no grave goods.

Grave 18 was discovered to the east of grave 14 [see *Fig. 8*]. It consisted of a rectangular burial chamber lined with distinct light sand-colored walls of cohesive consistency, oriented N–S on the longer axis and measuring 1.40 m by 1.00 m. A pottery coffin with a semi-cylindrical two-part lid was placed inside. Fragments of the lid were found collapsed into the lower part of the coffin [*Fig. 9* bottom right]. The body of the deceased was laid in tightly contracted position, on the left side, head to the north. Burial goods comprised four ceramic and four stone vessels.

Another structure (S3-163) made of mud bricks was uncovered to the east of grave 17. Its shape at the excavation level (Level 12B, altitude 5.05 m) was close to an oval, measuring 1.50 m by 1.00 m; it was oriented NE–SW.

Exploration of Level 14 (altitude 4.90 m) in the southern part of the trench revealed the outline of a wall (S3-167), oriented NE–SW. It ran to the northeast (it had been noted already in a part of the trench explored in 2011) and southwest.

The outline of a rectangular structure (S3-168) was observed farther to the east of this structure.

Altogether 12 graves were explored and several others were located in trench S3 in the years 2012–2013. Pottery found in six of these graves dated the cemetery to the end of the Protodynastic and Early Dynastic periods. A grave of Dynasty 0–Naqada IIIB period (grave 3) and graves of Naqada IIIC2/D (graves 7, 12 and 18) were among the burials that were dated more precisely (Kazimierczak 2014a). The chronology of further graves was not as obvious for lack of sufficient grave goods, but a preliminary analysis by Magdalena Kazimierczak led to the tentative assumption that grave 9 could be dated to the First Dynasty (Naqada IIIC) and that grave 5 was of the second part of the Second Dynasty. The lack of assemblages

(graves 11, 15, 13, 17) or presence of only beads in others (e.g., graves 4 and 14) made it difficult to date these graves.

Some of described graves were cut into the mud-brick walls of architectural structures of undoubtedly older chronology. A precise dating and function analysis of the latter remain uncertain prior to the completion of the excavation, but it is possible that we are dealing here with the remains of settlement structures. It seems to concern also some of the structures of undoubtedly later chronology, explored in 2012 in the northeastern part of the trench. If so, the presence of both earlier and later settlement remains and superimposed graves would mirror an observation made also at other Nile Delta sites, including Tell el-Farkha (Ciałowicz 2008: 511, Table 1) and Tell Ibrahim Awad (van den Brink 1992: 50).

TRENCH S3B

With the exploration of the main trench S3 being extended in time due to the presence of graves and the resulting enlargement of the excavated area, a test trench S3B, sized 5 m by 5 m, started to be explored in 2012 [Fig. 1]. It was situated to the east of the main trench, within a small depression. The objective was to define the extent of the cemetery in this direction and to obtain a stratigraphic sequence and data suitable for establishing the chronology of this part of the site.

Artifacts included mainly fragments of ceramic vessels, fragments of flint tools, stone objects and animal bones. Most of them were found in a layer of loose composition and brown color, situated in the western part of the trench.

A small section of a wall (S3-135) oriented NW–SE was recorded on Level 18 (altitude 4.50 m). The pottery material obtained from this area was mostly of Naqada III chronology (preliminary pottery analysis by M. Kazimierczak).

TRENCH T5

Trench T5 was situated in the north-eastern part of the tell, north of trench S1 (Jucha et al. 2013: 109–110) and east of a trench excavated earlier by Egyptian archaeologists [Fig. 1]. Its surface fell from

the southeast (Levels 1 and 2, altitude respectively 7.60 and 7.50 m in the south-eastern part in square S8C) to the north-west (Level 13, altitude 6.40 m in squares R7AC). The material collected from the

surface as well as from strata explored in 2010 in trench S1 to a depth of approximately 1.70 m below the surface level contained mostly Old Kingdom and Early Dynastic pottery (Jucha 2009: Figs 40–41; 2010: Fig. 2; Jucha et al. 2013), hence it was assumed that this part of the site had been inhabited at least until the Old Kingdom period.

Moreover, a magnetic map of the area (Jucha and Buszek 2011: 181–182; Jucha et al. 2013: 113–114) revealed the presence of some structures there. It was also assumed, based on the results of initial work, that all the successive phases of occupation could be represented, starting from the Lower Egyptian Culture, seeing that among others coring by Michał Wasilewski had indicated the presence of accumulations 5.50–6.00 m thick.

Work which started in 2012 on are R7 (10 m by 10 m) was extended in 2013 to 15 m by 21 m (full size of the trench in are R7 and R8, squares S7AC and S8AC, and the southern ends of squares R6CD and S6C). Differences in surface altitude within the trench area focused the excavation mostly on the northeastern and southern parts. Layers up to approximately 1.10 m below the surface of the tell (Level 12, altitude 6.50 m) were explored, yielding material that confirmed the preliminary chronology established during earlier fieldwork (Jucha 2010: 381–883; Jucha et al. 2013: 108–110).

LATE OLD KINGDOM

It was tentatively assumed that the uppermost strata contained pottery forms characteristic mostly of the late Old Kingdom, especially of the Sixth Dynasty, although some of them are also known from the Fifth Dynasty (Jucha and

Bąk-Pryc forthcoming; Kazimierczak 2014b).

The strata provided, among others, modest remains of very thin walls (about 0.12 m) built of bright-yellow, sand-tempered bricks (Jucha and Bąk-Pryc forthcoming; Małecka-Drozd forthcoming). The structures were about 0.15–0.20 m below the surface and mainly in the south and southeastern part of the exposed area (squares R8BD and S8AC). Extensive animal burrowing, among others, had made the architecture practically unrecognizable, but a N–S/E–W orientation (NE–SW in a few cases, however) could be assigned to the said period. Walls belonging to older structures were uncovered in some cases on the same level as the lower parts of late Old Kingdom walls (Levels 7 and 8, altitude respectively 7.00 and 6.90 m).

Several rounded structures (storage pits or silos), were excavated. Those in the southeastern part of the trench (T5-6A/T5-6B; T5-50/T5-63; T5-51/T5-62) were sunk below the base of late Old Kingdom walls (Jucha et al. forthcoming), but late Old Kingdom pottery indicated their attribution to this chronological phase. Their bottom was not reached during the reported seasons. The structures were encased in a layer of silty grey mud approximately 0.10 m thick. Similar or even darker and siltier grey mud, which crumbled upon drying, was found inside at least one structure (T5-6A/T5-6B). No traces of distinct bricks were noted.

EARLY OLD KINGDOM

Strata below yielded pottery that showed an affinity to forms characteristic of the earlier phases of the Old Kingdom. These in most cases were similar to forms known from the Fourth Dynasty, although forms

first appearing during the Third Dynasty or even the Early Dynastic period were also present (preliminary pottery analysis by M. Kazimierczak). Remains of rectangular structures, which contrary to the later period shared a NW–SE orientation, were exposed mainly in the southern (R8, S8AC) and northeastern (R6D, R7B, S6C, S7A) parts of the trench.

Walls were wider than the later ones, from about 0.25 m to 0.60 m (Jucha and Bąk-Pryc forthcoming; Małecka-Drozd forthcoming), but the same kind of bright yellow, sand-tempered bricks was used for the most part. Mud bricks were used occasionally. Most bricks were of a conventional size: averaging 0.12–0.15 m by 0.25–0.30 m. A different type of brick was identified in some structures: of the same length more or less, but narrower (approximately 0.10 m wide).

Although animal burrowing and later construction had disturbed the layers in question, a clear housing arrangement was distinguished. It comprised entrances, corridors, rectangular rooms and probably courtyards. Furthermore, in several cases, rounded structures were also found within the rectangular ones; these were interpreted as remains of silos. Better preserved walls, rising to about 0.50 m above the level explored during the 2013 season, were exposed in the southern part of the trench, but even here the extent of disturbance by later activities made it difficult to establish separate buildings, rooms and location of entrances.

Nevertheless, at least in the case of one building, two rectangular spaces: T5-32/T5-57 (7.20 m by 2.90 m) on the east and T5-43 (4.80 m by 2.80 m) on the west, were distinguished [Fig. 11]. The former could be a small courtyard. Between them was

a narrow corridor (T5-40D), disturbed in its southern part by a later rounded structure (T5-50/T5-63). A fragmentarily preserved clay figurine of a naked, pregnant woman was found in this passage (Level 9; see also below) [Fig. 10].

The whole building, with walls 0.30–0.50 m wide, was oriented in line with the main axes of the period. The east wall of the area T5-32/T5-57, located to the east of the corridor, was disturbed in its southern and northern parts, whereas the west wall at its southern end by the said rounded structures of presumed later date. A round brick structure (about 2.20 m



Fig. 10. Figurine of a pregnant woman (early Old Kingdom, Third–Fourth Dynasties) (Photo M.A. Jucha)

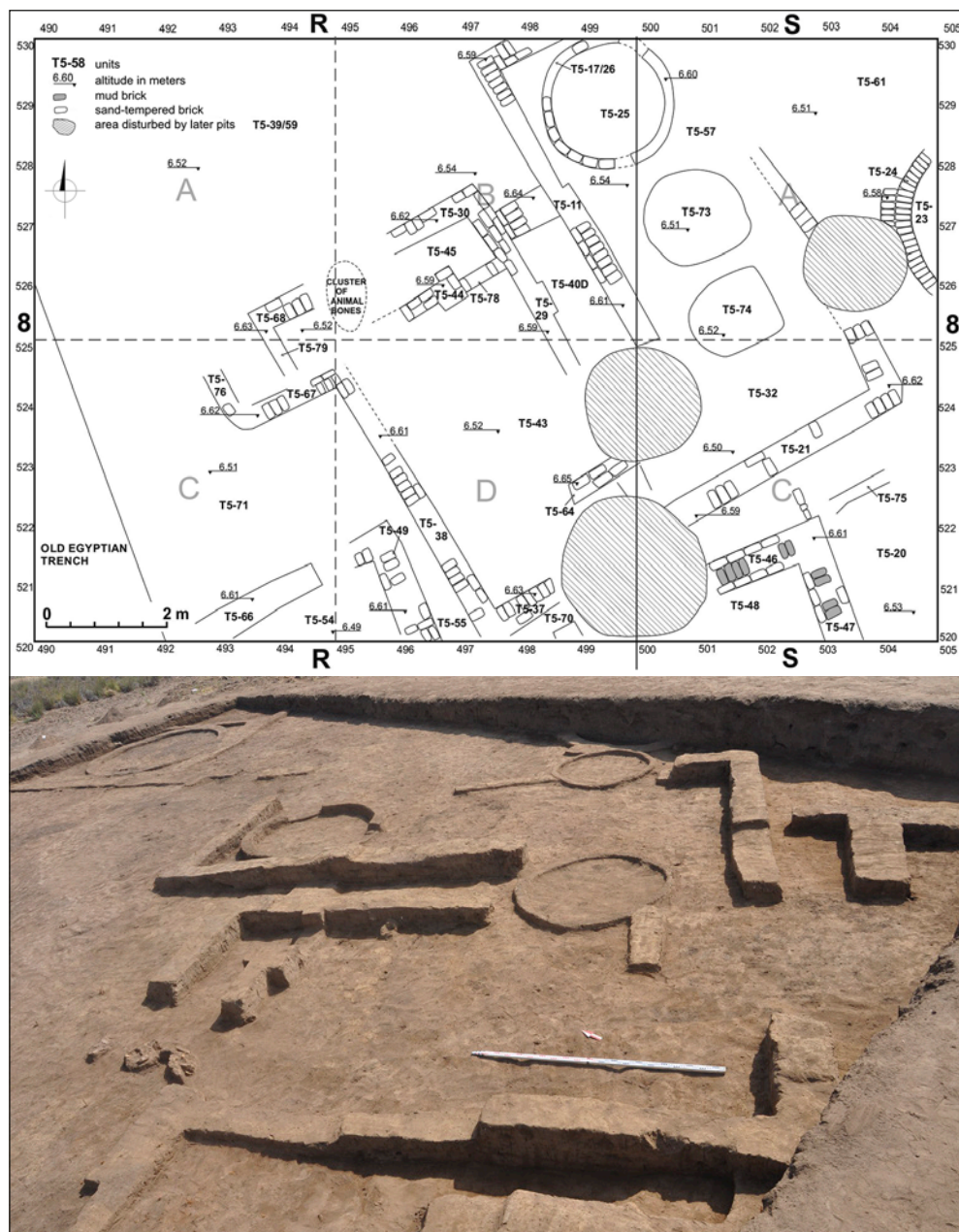


Fig. 11. Trench T5: top, plan of early Old Kingdom (Third–Fourth Dynasties) structures in the southern part of the trench, Levels 11–12; bottom, view from the southwest (Digitizing N. Malecka-Drozd; photo M.A. Jucha)

in diameter), probably a silo (T5-17/26/T5-25), was situated in the northern part. Two openings in the bottom parts of the wall identified it as the most popular type of Old Kingdom granary (Badawy 1954: 58–59; Roik 1988: 186–191, Figs 279–304; Chłodnicki 2012: 29–31, Fig. 21).

The east and south walls of room T5-43 were also disturbed by rounded structures. A dark, burnt layer was recorded in the southwestern corner of the room. The entrance (with a mud threshold) may have been located in the northeastern part of the room. A narrow corridor (T5-45) parallel to the north wall led to the room. To the west the situation is unclear, but it was assumed that the entrance to the corridor and also to the described part of the building was located on the northwest. The two parts of the building could have also communicated via the corridor T5-40D, but it is impossible to be sure owing to the disturbed layers here.

Another silo (T5-24/T5-23) explored to the east of the building had the bottom part of its interior filled with silty dark grey mud, crumbling when dry. A fragmentarily preserved mill-stone and a complete grinder were preserved nearby.

Fragments of two walls (T5-46, T5-47) with slightly shifted orientation compared to the building described above formed the corner of a room (T5-48) in the south-eastern part of the trench (Square S8C). The interior was filled with a characteristic dark, burnt deposit. Loose reddish soil was found between the room and the building to the north. Both structures were disturbed, however, by a circular feature (T5-6A/T5-6B) of later date.

The northeastern part of trench T5 (squares R7BD, S7AC, and the southern

ends of squares R6D and S6C), where the surface sloped from the south down to the northwest, did not provide any remains from the later part of the Old Kingdom. The set of structures, which appeared almost directly below the surface, yielded pottery of the earlier part of the Old Kingdom. One of these features was a large silo (T5-5/T5-4, about 3.20 m in diameter) situated at the southern end of a rectangular area (room or courtyard) [Fig. 12]. Part of it continued in the unexplored area to the north. The wall (T5-56) located to the west of the silo may have been the western boundary of the building.

Fragments of walls in the northeastern corner of the trench, to the east of a narrow wall (T5-12A) delimiting the area with

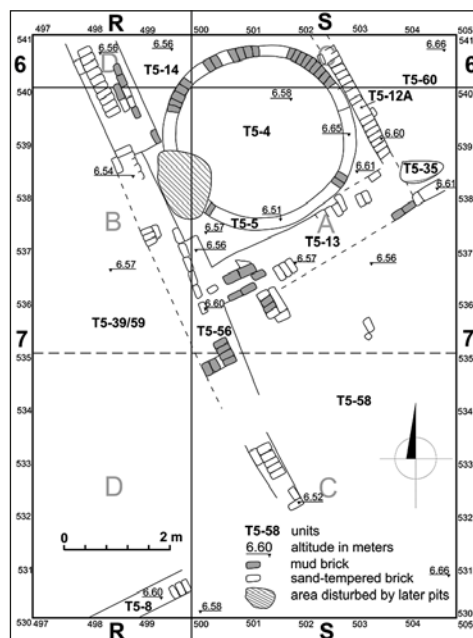


Fig. 12. Trench T5: early Old Kingdom structures in the northern part of the trench, Level 11 (Third–Fourth Dynasties) (Digitizing N. Małecka-Droz)

a silo on that side, could belong to yet another room. Possibly also the remains beside the south wall (T5-13) should be considered as further rooms. Since the area to the south of these structures was heavily disturbed by animal burrowing, the relationship between the northern layout and the southern set of buildings was difficult to recognize.

Pottery was the most abundant category of finds from the trench. Several complete or reconstructable pots were found. Flint artifacts occurred also in large quantity. They included mostly sickle blades, but the

presence of a few knives and fragments of knives was noted. A number of grinders and millstones was also found. Personal adornments, among them faience or bone beads, were attested in lesser quantities. The finds included also the abovementioned fragmentarily preserved figurine of a pregnant woman [see above, *Fig. 10*] made of clay, with genital features marked by dots within a frame made by an incised line. The way in which it was marked clearly refers to similar finds dated to the Early Dynastic and Old Kingdom periods in Egypt (Ucko 1968; Adams 1974: Pls 44–45).

Mariusz A. Jucha

Institute of Archaeology, Jagiellonian University in Kraków

31-007 Kraków, Poland, ul. Gołębia 11

m.jucha@murra.pl

Grzegorz Bąk-Pryc

Institute of Archaeology, Jagiellonian University in Kraków

31-007 Kraków, Poland, ul. Gołębia 11

grzegorz.pryc@uj.edu.pl

Natalia Małecka-Drozd

Institute of Archaeology, Jagiellonian University in Kraków

31-007 Kraków, Poland, ul. Gołębia 11

nbmalecka@gmail.com

REFERENCES

- Adams, B. (1974). *Ancient Hierakonpolis*. Warminster: Aris & Phillips.
- Badawy, A. (1954). *A history of Egyptian architecture I. From the earliest times to the end of the Old Kingdom*. Giza: A. Badawy.
- Chłodnicki, M. (2012). Lower Egyptian, Protodynastic and Early Dynastic settlements on the northern part of the Eastern Kom. In M. Chłodnicki, K. M. Ciałowicz, and A. Mączyńska (Eds.), *Tell el-Farkha I. Excavations 1998–2011* (pp. 19–34). Poznań: Poznań Archaeological Museum.
- Ciałowicz, K. M. (2008). The nature of the relation between Lower and Upper Egypt in the Protodynastic period. A view from Tell el-Farkha. In B. Midant-Reynes, Y. Tristant, J. Rowland, and S. Hendrickx (Eds.), *Egypt at its origins 2: Proceedings of the international conference "Origin of the State. Predynastic and Early Dynastic Egypt", Toulouse (France), 5th–8th September 2005* [=OLA 172] (pp. 501–513). Leuven: Peeters.

- Jucha, M. A. (2009). The north-eastern part of the Nile Delta — Research perspectives. Polish archaeological survey in the Ash-Sharqiyyah Governorate. In J. Popielska-Grzybowska and J. Iwaszczuk (Eds.), *Proceedings of the Fifth Central European Conference of Young Egyptologists: Egypt 2009. Perspectives of research, Pułtusk 22–24 June 2009* [= *Acta Archaeologica Pułtuskiensia* 2] (pp. 83–88). Pułtusk: Pułtusk Academy of Humanities.
- Jucha, M. A. (2010). Tell el-Murra. The Predynastic north-eastern Nile Delta. *Folia Orientalia*, 47, 379–390.
- Jucha, M. A., with contributions by G. Bąk-Pryc, N. Małecka-Drozd, M. Kazimierczak, M. F. Ownby, K. Mądrzyk, A. Pankowska, B. Woźniak, R. Ablamowicz (forthcoming). Polish excavations at Tell el-Murra in the Nile Delta. Preliminary report 2013–2015. *Archeologia*.
- Jucha, M. A., and Bąk-Pryc, G. (forthcoming). Settlement and cemetery — new research on the 4th/3rd millennium Nile Delta site at Tell el-Murra. In *Egypt at its origins 5. Proceedings of the Fifth International Conference of Predynastic and Early Dynastic Studies, Cairo, 13th–18th April 2014*.
- Jucha, M. A., Bąk-Pryc, G., and Czarnowicz, M. (2014). Tell el-Murra (Northeastern Nile Delta survey): Season 2011. *PAM*, 23/1, 141–152.
- Jucha, M. A., Błaszczuk, K., Buszek, A., and Pryc, G. (2013). Tell el-Murra (Northeastern Nile Delta Survey). Season 2010. *PAM*, 22, 105–120.
- Jucha, M. A., and Buszek, A. (2011). Tell el-Murra (North Eastern Nile Delta Survey). Season 2008. *PAM*, 20, 177–182.
- Kazimierczak, M. (2014a). Pottery from Tell el-Murra graves. Seasons 2011–2012. *SAAC*, 18, 101–118.
- Kazimierczak, M. (2014b). Meidum bowls from Tell el-Murra, Trench T5 (season 2013). In M. A. Jucha, J. Dębowska-Ludwin, and P. Kołodziejczyk (Eds.), *Aegyptus est imago caeli: Studies presented to Krzysztof M. Ciałowicz on his 60th birthday* (pp. 161–166). Kraków: Institute of Archaeology, Jagiellonian University in Kraków; Archaeologica Foundation.
- Kemp, B. J. (2000). Soil (including mud-brick architecture). In P. T. Nicholson and I. Shaw (Eds.), *Ancient Egyptian materials and technology* (pp. 78–103). Cambridge University Press.
- Małecka-Drozd, N. (forthcoming). The Old Kingdom settlement in the Nile Delta on the example of Polish excavations at Tell el-Murra, Sharqiyya Governorate. In *Proceedings of the 18th Symposium on Mediterranean Archaeology, 24–26 of April 2014, Wrocław (Poland)*.
- Roik, E. (1988). *Das altägyptische Wohnhaus und seine Darstellung im Flachbild I–II*. Frankfurt am Main: P. Lang.
- Spencer, A. J. (1979). *Brick architecture in Ancient Egypt*. Warminster: Aris and Phillips.
- Ucko, P. J. (1968). *Anthropomorphic figures of Predynastic Egypt and Neolithic Crete with comparative material from the prehistoric Near East and mainland Greece*. London: Andrew Szmidla.
- van den Brink, E. C. M. (1992). Preliminary report on the excavations at Tell Ibrahim Awad, seasons 1988–1990. In E. C. M. van den Brink (Ed.), *The Nile Delta in transition, 4th–3rd millennium B.C. Proceedings of the seminar held in Cairo, 21.–24. October 1990, at the Netherlands Institute of Archaeology and Arabic Studies* (pp. 43–68). Tel Aviv: E. C. M. van den Brink.

CONTENTS

CONTENTS

ACKNOWLEDGMENTS	10
ABBREVIATIONS.....	11

PAM REPORTS

PCMA FIELD MISSIONS AND PROJECTS IN 2012 AND 2013 (WITH MAP)	17
--	----

EGYPT

ALEXANDRIA: KOM EL-DIKKA

ALEXANDRIA: EXCAVATIONS AND PRESERVATION WORK ON KOM EL-DIKKA,
SEASONS 2012 AND 2013

<i>Grzegorz Majcherek</i>	29
---------------------------------	----

ISLAMIC NECROPOLIS AT KOM EL-DIKKA IN ALEXANDRIA:
RESEARCH IN THE 2010–2013 SEASONS

<i>Emanuela Kulicka</i>	62
-------------------------------	----

ISLAMIC GLASS FROM AREA U (2012–2013)

<i>Renata Kucharczyk</i>	73
--------------------------------	----

MARINA EL-ALAMEIN

RESEARCH AND CONSERVATION IN MARINA EL-ALAMEIN IN THE 2012
AND 2013 SEASONS. THE POLISH–EGYPTIAN CONSERVATION MISSION

<i>Rafał Czermer, Grażyna Bąkowska-Czermer, Wiesław Grzegorek</i>	87
---	----

SELECTED CONSERVATION WORK IN MARINA EL-ALAMEIN IN THE 2012
AND 2013 SEASONS

<i>Marlena Koczorowska, Wojciech Osiak</i>	101
--	-----

RESEARCH AND CONSERVATION IN THE ROMAN BATHS OF MARINA EL-ALAMEIN
IN THE 2012 AND 2013 SEASONS (POLISH–EGYPTIAN CONSERVATION MISSION)

<i>Rafał Czermer, Grażyna Bąkowska-Czermer, Grzegorz Majcherek</i>	113
--	-----

TELL EL-RETABA

TELL EL-RETABA, SEASON 2012

<i>Sławomir Rzepka, Józef Hudec, Łukasz Jarmużek, Lucia Hulková, Veronika Dubcová</i>	139
---	-----

APPENDIX: TELL EL-RETABA 2012. PRELIMINARY REPORT ON ARCHAEOBOTANICAL
INVESTIGATIONS

<i>Claire Malleson</i>	156
------------------------------	-----

TELL EL-RETABA 2012: THE POTTERY

<i>Anna Wodzińska</i>	164
-----------------------------	-----

CONTENTS

TELL EL-FARKHA

TELL EL-FARKHA. EXCAVATIONS, 2012–2013

Marek Chłodnicki, Krzysztof M. Ciałowicz 173

TELL EL-MURRA

TELL EL-MURRA (NORTHEASTERN NILE DELTA SURVEY). SEASONS 2012–2013

Mariusz A. Jucha, Grzegorz Bąk-Pryc, Natalia Małecka-Drozd 199

SAQQARA

SAQQARA: SEASONS 2012 AND 2013/2014

Karol Mysliwiec 215

APPENDIX: CONSERVATION WORK IN SAQQARA (2012 AND 2014)

Zbigniew Godziejewski, Urszula Dąbrowska 224

SAQQARA 2012: THE POTTERY

Teodozja I. Rzeuska 230

WEST THEBES (ASASIF, DEIR EL-BAHARI) AND VALLEY OF THE NILE

THE TOMBS OF ASASIF: ARCHAEOLOGICAL EXPLORATION
IN THE 2013/2014 SEASON

Patryk Chudzik 239

TEXTILES FROM TOMB II IN DEIR EL-BAHARI: PRELIMINARY REPORT
FROM SEASON 2012/2013

Aleksandra Hallmann 247

DEIR EL-BAHARI. TEMPLE OF TUTHMOSIS III, CAMPAIGNS 2012–2013

Monika Dolińska 257

REPORT FROM FIELD RECONNAISSANCE AT GEBELEIN, KHOZAM AND EL-RIZEIQAT

Wojciech Ejsmond, Julia M. Chyla, Cezary Baka 265

DAKHLEH OASIS

DAKHLEH OASIS PROJECT, PETROGLYPH UNIT: SEASONS 2012 AND 2013

Ewa Kuciewicz, Paweł Polkowski, Michał Kobusiewicz 275

BERENIKE

BERENIKE PROJECT. HELLENISTIC FORT, ROMAN HARBOR, LATE ROMAN TEMPLE, AND
OTHER FIELDWORK: ARCHAEOLOGICAL WORK IN THE 2012 AND 2013 SEASONS

Steven E. Sidebotham, Iwona Zych, Joanna K. Rądkowska, Marek Woźniak 297

SUDAN

DONGOLA

DONGOLA. SEASONS IN 2012–2013

Włodzimierz Godlewski 325

APPENDIX: THE SKELETAL REMAINS FROM THE SANCTUARY OF ANNA
IN THE MONASTERY ON KOM H

Robert Mahler 340

CONTENTS

WALL INSCRIPTIONS IN THE SOUTHWEST ANNEX TO THE MONASTERY ON KOM H AT DONGOLA: REPORT ON WORK IN THE 2013 SEASON <i>Adam Łajtar</i>	344
CRYPT 3 IN THE NORTHWEST ANNEX OF THE MONASTERY ON KOM H IN DONGOLA: REPORT ON THE EXPLORATION IN 2012 <i>Robert Mahler, Włodzimierz Godlewski, Katarzyna Danys-Lasek, Barbara Czaja</i>	352
BANGANARTI AND SELIB	
BANGANARTI AND SELIB IN 2011/2012 AND 2013 <i>Bogdan Żurawski</i>	369
EXCAVATIONS AT SELIB 2 IN 2012 <i>Roksana Hajduga, Katarzyna Solarska</i>	389
SELIB 1. PRELIMINARY REPORT FOR THE 2012 AND 2013 SEASONS <i>Aneta Cedro</i>	397
FAUNAL REMAINS FROM THE FORTIFIED SETTLEMENT AROUND THE CHURCH AT BANGANARTI IN SUDAN <i>Marta Osypińska</i>	411
EARLY MAKURIA (MTOM) PROJECT	
ANIMAL REMAINS FROM THE EARLY MAKURIAN CEMETERY IN EL-ZUMA (SEASON 2013) <i>Urszula Iwaszczuk</i>	425
GHAZALI	
GHAZALI 2012: PRELIMINARY REPORT <i>Artur Obłuski, Grzegorz Ochala, Miron Bogacki, Wiesław Małkowski, Szymon Maślak, Zaki ed-Din Mahmoud</i>	431
CYPRUS	
NEA PAPHOS	
NEA PAPHOS. SEASONS 2012 AND 2013 <i>Henryk Meyza</i>	443
LEBANON	
JIYEH	
PRELIMINARY REPORT ON THE 2012 AND 2013 EXCAVATION SEASONS AT JIYEH (PORPHYREON): WORK IN SECTOR D (RESIDENTIAL QUARTER) <i>Tomasz Waliszewski, Magdalena Antos, Piotr Jaworski, Piotr Makowski, Marcin Romaniuk, Rafał Solecki, Agnieszka Szymczak</i>	453
PRELIMINARY RESULTS OF A STRATIGRAPHIC ANALYSIS OF LATE ROMAN AND EARLY BYZANTINE ARCHITECTURE IN THE RESIDENTIAL QUARTER OF JIYEH <i>Michał Dzik</i>	475

CONTENTS

RESULTS OF A SURVEY CONDUCTED IN THE AREA OF THE JIYEH MARINA RESORT HOTEL COMPLEX IN THE 2012 SEASON <i>Zofia Kowarska, Szymon Lenarczyk</i>	491
---	-----

KUWAIT

AL-SUBIYAH AND FAILAKA ISLAND

TUMULUS BURIAL FIELD ON THE NORTH COAST OF KUWAIT BAY. PRELIMINARY EXCAVATION REPORT ON THE SPRING SEASON IN 2012 <i>Łukasz Rutkowski</i>	505
CHRISTIAN SETTLEMENT AT FAILAKA, QUSUR SITE (KUWAIT): EXCAVATIONS IN 2011 AND 2013 <i>Magdalena Żurek</i>	529
PRELIMINARY REPORT ON THE ARCHAEOLOGICAL SURVEY OF THE JOINT KUWAITI–POLISH MISSION, FAILAKA ISLAND, 2012 <i>Franciszek Pawlicki</i>	547
FAILAKA ARCHAEOLOGICAL RESEARCH PROJECT. PRELIMINARY RESULTS AFTER THE FIRST SEASON OF EXCAVATION AT THE KHARAIB EL-DESHT SITE IN 2013 <i>Agnieszka Pieńkowska</i>	560
APPENDIX 1: KHARAIB EL-DESHT 2013: POTTERY. PRELIMINARY REPORT <i>Marta Mierzejewska</i>	571
APPENDIX 2: SURVEY OF KHARAIB EL-DESHT BAY ON FAILAKA ISLAND: PRELIMINARY REPORT <i>Magdalena Nowakowska</i>	579

IRAQI KURDISTAN

NEWCOMERS AND AUTOCHTHONS. PRELIMINARY REPORT ON 2013 ACTIVITIES IN THE KURDISTAN AUTONOMOUS REGION, IRAQ <i>Dorota Ławecka</i>	591
---	-----

PAM STUDIES

LEVALLOIS TRADITION EPIGONES IN THE MIDDLE NILE VALLEY: SURVEY IN THE AFFAD BASIN <i>Marta Osypińska, Piotr Osypiński</i>	601
ZOOMORPHIC CLAY FIGURINES FROM TELL ARBID. PRELIMINARY REPORT <i>Maciej Makowski</i>	627
PLANT MACROFOSSILS FROM THE SITE OF TELL ARBID, NORTHEAST SYRIA (3RD–2ND MILLENNIUM BC). PRELIMINARY REPORT <i>Aldona Mueller-Bieniek, Krystyna Wasylkowa, Anna Smogorzewska</i>	657
THE ANIMAL ECONOMY OF PEOPLE LIVING IN THE SETTLEMENT OF TELL RAD SHAQRAH (SYRIA) <i>Joanna Piątkowska-Matecka, Rafał Koliński</i>	675

CONTENTS

THE SOLAR ALTAR IN THE TEMPLE OF HATSHEPSUT AT DEIR EL-BAHARI: ARCHITECTURE AND IDEOLOGY <i>Andrzej Ćwiek</i>	693
FAIENCE OBJECTS FROM THE TOMB MMA 1152 AT SHEIKH ABD EL-GURNA <i>Patryk Chudzik, Andrzej Ćwiek</i>	701
INDIAN STEEL: A FORGOTTEN COMMODITY OF THE GREAT TRADE ROUTES <i>Marek Woźniak</i>	709
MONETIZATION OF ROMAN EGYPT DURING THE FLAVIAN DYNASTY (AD 69–96): THE CASE OF ALEXANDRIA AND BERENIKE <i>Katarzyna Lach</i>	727
CROSS-CULTURAL BEAD ENCOUNTERS AT THE RED SEA PORT SITE OF BERENIKE, EGYPT. PRELIMINARY ASSESSMENT (SEASONS 2009–2012) <i>Joanna Then-Obluska</i>	735
A NEW LOOK ON SOME OLD GLASS FINDS FROM PALMYRA <i>Krystyna Gawlikowska</i>	779
NEW INSIGHTS INTO NUBIAN ARCHERY <i>Łukasz Zieliński</i>	791
INDEX OF SITES	803
GUIDELINES FOR AUTHORS	804
PCMA PUBLICATIONS	805

POLISH ARCHAEOLOGY IN THE MEDITERRANEAN (PAM)
Annual of the Polish Centre of Mediterranean Archaeology, University of Warsaw

PAM Editor-in-chief: Iwona Zych

Volume 24/1: Research

All texts peer-reviewed.

<http://www.pcma.uw.edu.pl/en/pam-journal/pam-independent-reviewers/>

Press-reviewing process: Urszula Wicenciak

Bibliographic editor: Aleksandra Zych

Language consultation: Iwona Zych

Technical editor: Iwona Zych

Digital processing: Ewa Czyżewska-Zalewska

Image processing and copyediting assistance: Ewa Czyżewska-Zalewska, Szymon Maślak, Marta Momot, Marek Puzkarski, Urszula Wicenciak

Original graphic design: Jerzy Kowalski, updated by Ewa Czyżewska-Zalewska for PCMA

DTP: Ewa Czyżewska-Zalewska, assisted by Agnieszka Dzwonek

Cover: Tumulus SB 100 from the Al-Subiyah region of Kuwait during exploration
(Photo M. Makowski)

ISSN 1234–5415 (Print), ISSN 2083–537X (Online)

© Polish Centre of Mediterranean Archaeology, University of Warsaw, Warszawa 2015

© Wydawnictwa Uniwersytetu Warszawskiego, Warszawa 2015

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the Polish Centre of Mediterranean Archaeology of the University of Warsaw.

Polish Centre of Mediterranean Archaeology, University of Warsaw

00-497 Warszawa, Poland, ul. Nowy Świat 4

e-mail: pam.pcma@uw.edu.pl

www.pcma.uw.edu.pl

Orders can be placed c/o Agnieszka Pieńkowska

a.pienkowska@uw.edu.pl

University of Warsaw Press

00-497 Warszawa, Poland, ul. Nowy Świat 4

www.wuw.pl; e-mail: wuw@uw.edu.pl

Internet Bookshop: www.wuw.pl/ksiegarnia

Printed in Poland

POLISH ARCHAEOLOGY IN THE MEDITERRANEAN

Published annually since 1990



PAM XXIV/1 *Research*

REPORTS

Fieldwork projects carried out by PCMA teams in the Ancient Near East and Africa

- scope: archaeological, geophysical, restoration and study work
- areas of interest: Egypt, Sudan, Cyprus, Syria, Lebanon, Kuwait, Iraq
- timespan: ten millennia from prehistory and protohistory through the medieval period

STUDIES

- archaeological, architectural and material research within the fields of study covered by PCMA fieldwork

PAM XXIV/2 *Special Studies*

Deir el-Bahari Studies

Editor Zbigniew E. Szafrński

Volume dedicated to research on specific egyptological and archaeological themes resulting from the ongoing work of the Polish conservation and restoration project in the Temple of Queen Hatshepsut in Deir el-Bahari (West Thebes, Luxor, Egypt). The 11 contributions included in this book concern mostly a later phase in the occupation of the complex, in the Third Intermediate Period (11th–8th century BC), when the abandoned temple was reused as a burial ground. A few of the articles refer to the original architectural form and decoration of the temple from the times of Hatshepsut (15th century BC). Also included is an article on tombs of three other queens of the Eighteenth Dynasty in the Valley of the Kings.

Available as full texts on-line at www.pcma.uw.edu.pl

PAM volumes 17 to the present available on-line from www.ceeol.com

Information and orders:

www.pcma.uw.edu.pl

pcma@uw.edu.pl

pam.pcma@uw.edu.pl

www.wuw.pl/ksiegarnia

RESEARCH

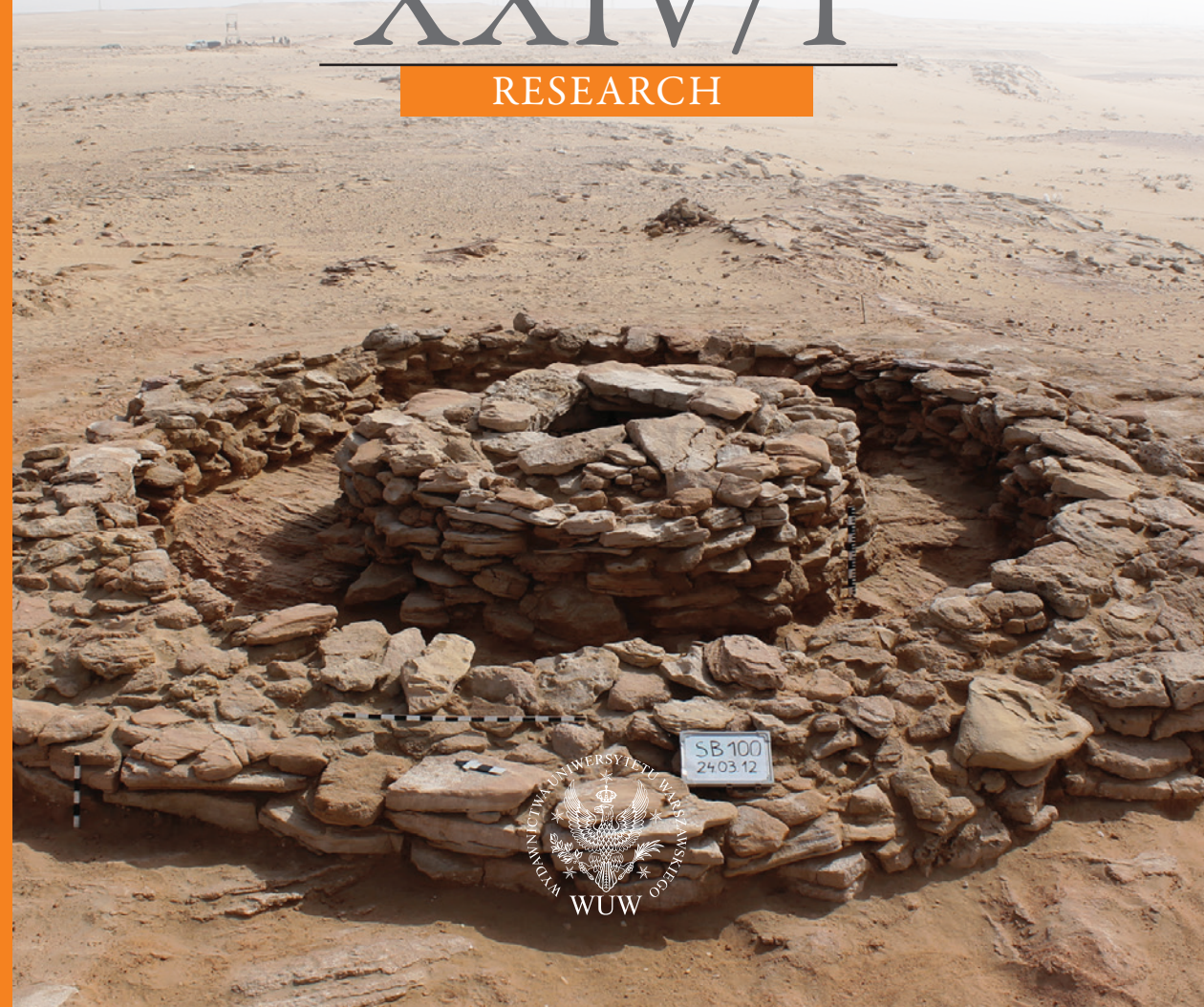
PAM XXIV/1

POLISH CENTRE OF MEDITERRANEAN ARCHAEOLOGY
UNIVERSITY OF WARSAW

POLISH ARCHAEOLOGY IN THE MEDITERRANEAN

XXIV/1

RESEARCH



UNIVERSITY
OF WARSAW

Polish Centre of
Mediterranean Archaeology

