# TELL EL-FARKHA (GHAZALA) SEASON 2004

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The present campaign, financed by Jagiellonian University in Cracow, Poznań Prehistoric Society, Poznań Archaeological Museum, Polish Centre of Mediterranean Archaeology of Warsaw University and the State Committee for Scientific Research (KBN), lasted from March 10 to June 22.<sup>1</sup>

Work continued in areas opened in 2003 on the Western and Central koms. The trenches investigated on the Eastern Kom in earlier seasons were now continued and extended. Post-processing studies, dealing with the pottery, flint and other stone tools, as well as the

human, animal and plant remains, were also carried out on site.

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# WESTERN KOM

Excavation of the western kom at Tell el-Farkha (closed by April 22) aimed at completing the exploration of features revealed in 2003 and excavating the underlying layers.

With the results bearing directly upon the work carried out in this area in 2000, a brief review of the earlier findings is in order. The two phases in question are the two earliest settlement phases on Tell el-Farkha. Phase 2 was clearly transitional and featured pottery and architectural remains typical of both the Naqada (IIc/d) and Lower Egyptian cultures. The older phase 1 was associated with Lower Egyptian culture exclusively.

#### THE BREWERIES

The building discovered in phase 2 deposits in 2000 was then thought to represent the earliest brewery of its time anywhere in the Nile Delta. It measured c. 4 x 4 m and consisted of three abutting circular structures. At the center of each was a clearly defined ring of bricks (0.40-0.60 m in diameter). Several long, narrow bricks rammed diagonally into the ground were found around them. The edges of the structure in question were surrounded by bricks laid on top of one other. Three postholes recorded outside this construction probably held the posts supporting the roof. Numerous thin, fired clay 'tiles' bearing plant impressions and human fingerprints were found among the fill deposits of ash and burnt earth, suggesting that the roof was made of organic materials covered with clay.

The 2000 season also saw the excavation of the eastern section of a large Lower Egyptian building made of organic materials, evidenced by a series of furrows (up to several dozen centimeters in length) filled with brown soil demarcating the layout of its walls. The interior division of the building into numerous rooms of various sizes was particularly notable, as was the use of a large number of posts as structural elements supporting the walls and roof.

Towards the end of the 2003 season a second brewery was discovered 10 m west of the first one, but was not excavated for lack of time.<sup>2</sup> This task was undertaken in 2004, but was completed only in part, owing primarily to the discovery in the underlying strata of a further two brewery buildings. Again, the complex stratigraphy and size of these structures (they covered a total surface area of c. 10 x 17 m) resulted in their not being excavated in full [Fig. 1]. Despite this, it can be said that all three of the brewery buildings uncovered in 2003 were probably slightly older than the one revealed in 2000 and described above. The chronological sequence is in this case significant. The earliest brewery was at some point destroyed by the annual Nile flood, a phenomenon that must have been relatively common in the Delta at the time. It should be borne in mind that at the time the island did not rise significantly above the river level. After an unspecified time, a second structure was built and when this, too, disappeared under inundation deposits of Nile silt, another building was raised. The last of the sequence was the building discovered in 2000 and described at the beginning of this report.

<sup>2</sup> Cf. PAM XV, Reports 2003 (2004), 102.

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All were similarly built and served the same purpose. Each building consisted of several subcircular features, surrounded by fire-dog type bricks. Some of these bricks were inserted diagonally into the ground to support thick-walled vats with a wide rim and narrow base. One of these vessels has even been found in situ. The distinct majority of the bricks were fired, though possibly not intentionally, as the same bricks tend to appear in sun-dried form as well. There is no doubt that fires were lit to heat the contents of the vats. Nine circular stands, all made of silt and each measuring about a meter in diameter, were found outside the construction unearthed in 2003. Upon being removed from the

fire the vats must have been placed on them. The plant material recovered from these features played an important role in the interpretation. Macroscopic paleobotanical analysis clearly demonstrated that the plant remains came from two successive phases in the process of beer-making. All of these structures were thus deemed to be breweries. Coarsely ground barley grains were placed in vats of hot water (around  $60^{\circ}$ C) and heated to obtain a homogeneous starter. The vessels were then removed from the heat and placed on the aforementioned silt pot-stands, where they were left for about a week for the fermentation process to take place, resulting in the production of a low-alcohol beer.

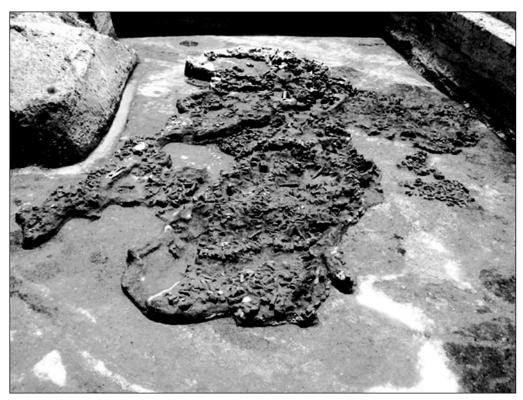


Fig. 1. Western Kom. Complex of breweries, view following excavations in 2004 (Photo R. Słaboński)

Historically, beer played a significant role both as a drink and as one of the principal gifts included among burial offerings. The structures discovered at Tell el-Farkha represent the oldest breweries ever to be found in the Nile Delta, and are probably contemporary with the brewery found several years ago in Hierakonpolis. These are probably the oldest breweries in the world and the excavated series of successive breweries suggests that the site of Tell el-Farkha must have been an important center of beer production during the second half of the 4th millennium BC.

## LOWER EGYPTIAN CULTURE FEATURES

Discoveries made over the past few seasons, relating to the earliest phase of the Western Kom, are equally surprising and unparalleled on other Egyptian sites. Beneath the monumental building associated with Naqada culture<sup>3</sup> and in the immediate vicinity of the breweries, evidence was discovered across virtually the entire excavated area (35 x 25 m) of a complex of features undoubtedly linked to the Lower Egyptian culture. The thick layer of Nile silt covering everything testified yet again to

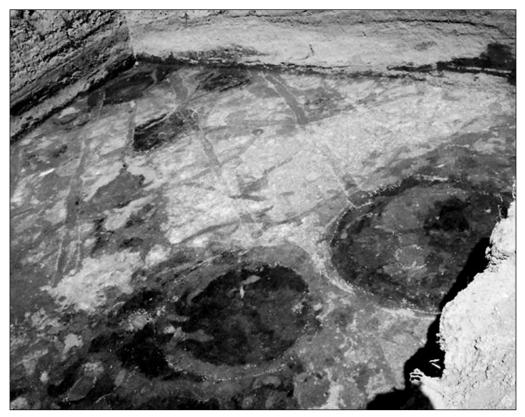


Fig. 2. Western Kom. Complex of features of Lower Egyptian Culture (Photo R. Słaboński)

<sup>3</sup> Cf. expedition reports for respective seasons in PAM XII, Reports 2000 (2001), 86-95; PAM XV, op. cit., 102-104.

frequent episodes of flooding of the island before human intervention led to a significant rise in the relative height of the *gezira*. It also shows that the site was periodically abandoned, although the reasons for this are difficult to ascertain.

The structures in question (two phases of use have been identified thus far) must have had walls made of organic materials, which left a trace in the form of narrow furrows (15-30 cm in width) filled with brown soil or silt (possibly the result of flooding). These structures are notable for the fact that they were divided into numerous small rooms (some measuring as little as 1.40 x 0.80 m) and contained large numbers of silt-lined pits (ranging from 0.20 m to over 1.00 m in diameter) [Fig. 2]. Some of these pits, in particular those next to the furrows, are of structural significance and no doubt held posts supporting the roof and walls. Others, found within the individual rooms, may have served as vessel stands, whilst the

Excavation on the Central Kom proceeded simultaneously with the work on the Western Kom. Once the trench marked out during previous seasons ( $521 \text{ m}^2$ ) was cleaned over its entire surface, excavations were carried out only in the northern part (7.50 m width), subsequently extending the trench a further 22.50 m to the west, hence an additional  $169 \text{ m}^2$ . The aim of this exercise was to establish the stratigraphy of the western part of the central tell in a relatively short space of time. In view of the complexity of the record, work progressed slowly and will have to be continued before sterile layers are reached.

Work carried out on the slope of the tell brought to light the remains of a mud-brick construction comprising parallel walls largest examples were probably storage pits. Those which were found to contain bricks and obvious traces of burning represented hearths. The complicated interior division may stem from the fact that some sections of the building, clearly serving as utility areas, may have been separated from other parts by low walls made of organic materials or silt.

The discovery of this complex defies previously held beliefs that prior to the emergence of Naqada culture the inhabitants of the Nile Delta represented a largely unstratified society, living in primitive, sunken-floored dwellings or shelters.

A modest amount of artifacts was found alongside the aforementioned structures. These consisted mostly of potsherds, although a few complete vessels were also discovered, some as solitary finds and others forming distinct concentrations. A modest number of flint tools, both whole and fragmentary, was also recovered from these deposits.

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(barely two bricks wide), and occasionally the remains of floors, silos and hearths. At a depth of about 1 m, the remains of a brick structure, nearly a meter thick and running in a zigzag, were discovered in the upper part of the trench. Mud-brick walls revealed at a depth of 1.50-20 m below present-day ground level represented a continuation of the buildings and silos excavated in 2003. Thus far, no structural remains were found at the foot of the slope at the west end of the trench. Only leveling layers and large quantities of broken ceramics were discovered here. The thickness of the deposit excavated ranged from c. 2 m in the upper part of the tell to 0.50 m at its foot. Material recovered from this deposit dated the surviving architectural remains to the Early Dynastic

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period. Valuable dating evidence was provided not only by pottery, but also by seals with hieroglyphic impressions. Among the more interesting finds was a ceramic disc fragment, around 80 cm in diameter, probably similar to the one found in 2002 but with the decorated part damaged. Other noteworthy items included rectangular slate palettes and a partially preserved owl figurine. One of the metalwork finds, consisting of a copper wire, rectangular in cross-section, slightly bent and shaped to form a loop at one end, could be part of a crown of Lower Egypt [Fig. 4]. The end opposite to the loop would originally have been fixed to the crown.

## NAQADIAN DEPOSITS

Work also resumed on the excavation of Naqadian deposits (phase 4 at Tell el-



Fig. 3 Central kom. Male figurine of clay (Photo R. Słaboński)



Fig. 4. Central Kom. Copper fragment of a crown of Lower Egypt (?) {Photo R. Słaboński)

Farkha) at the northern end of the old trench (levels 36-47), going down a further 0.60 m in relation to the level reached in 2003. As in previous seasons the remains of mud-brick buildings oriented NW-SE were recorded. The walls of these buildings were usually two-brick-lengths thick. Numerous remnants of kilns, hearths and grain silos were discovered inside the buildings and within the courtyards. At the bottom of the last layer to be excavated, the outline of a 1.50 m-thick wall dividing the site into two distinct zones emerged. The site stratigraphy of the eastern zone incorporated building remains, whilst that of the western zone clearly indicated that the layers had accumulated on a slope. The trench yielded large numbers of potsherds, several complete vessels and assorted stone tools – grindstones, quern fragments and flint knives, including bifacial ones. Two anthropomorphic clay figurines merit attention. One is 67 cm high and represents a crouching male figure (chin missing) with a large nose and schematically depicted hands [*Fig. 3*]. The second is a very schematic representation with indistinct features, the interpretation depending on which way it is looked at. A copper pin with a loop-shaped head was also recorded.

# EASTERN KOM

Work on the Eastern Kom continued on the two trenches there through May 11. As in previous years, excavation was conducted within two trenches. The first of these, the so-called North Trench, lies on the western slope of the kom, and had already yielded a number of settlement features during earlier seasons. The second, the South Trench, is situated on the southwestern slope and had revealed some Early Dynastic burials in 2001-2003.

## NORTH TRENCH

The section E93-94 was now explored beyond the alluvial deposits noted at a depth of 3.40 m, where digging had stopped in 2003. A trial pit dug then revealed these deposits to be 0.50 m thick, reaching down to the level of the island, which was also the level of the water-table. Work on the lower layers was postponed until 2004, possibly to a time of year when the water-table would be lower.

A few small pits filled with lumps of pug and sometimes large amounts of pottery, as well as single layers of mudbricks making up indistinct formations were discovered whilst excavating a silt deposit (Levels 24-28). Most of the trench, however, was occupied by layers of alluvium and backfill. Other than potsherds a miniature clay figurine of a hawk was also found. A shallow pit (10 cm) measuring 1.50 m in diameter was particularly interesting on account of its fill, which consisted of brown soil intercalated with silt. It yielded huge quantities of flint and agate debitage, the amount of agate especially being quite unusual considering the relatively few instances of the stone being noted so far on the site. Also found in the pit was a flint knife and two unique quartz objects: a very well worked artifact in the shape of a truncated cone, which had served as a hammer [Fig. 5], and an elongated (broken) hexagonal item. Judging by the flint knife and the pottery recovered from this pit, it was associated with Naqada culture.

Outlines of domestic features made of organic materials were noted in the *gezira* sands, which appeared once the silt layer

was removed. These features consisted of pits and postholes, and a series of furrows ranging in width from 20 to nearly 50 cm, demarcating a number of rooms. These linear features covered virtually the whole surface of the trench. The largest of the rooms measured c. 3 by 4 m, the smallest was barely over 1 m<sup>2</sup>. Like structures found in other parts of the trench, these features could be linked to Lower Egyptian culture.

Once excavation of section E93-94 had been completed, work began on the neighboring trench section, E83-84, covering an area of some 200 m<sup>2</sup>. This saw the joining of the north and south trenches. *Sebakhin* digging had badly damaged the surface here and cultural deposits had survived undisturbed only in the east end of E84. Pottery evidence provided a dating of the uppermost layers to the beginning of the Old Kingdom. However, no clearly defined structural remains have survived to bear



Fig. 5. Eastern Kom. Quartz hammer (Photo R. Słaboński)

witness to the architecture of this period.

The first intelligible feature was discovered 0.50 m below the ground surface and comprised a rectangular room with a semicircular apse extending it to the west, the walls surviving to a height of 0.80 m. Beneath and adjacent to this a series of bricks were noted in various formations, some more regular than others (probably delineating rooms dating from different settlement periods), pits and silos. In one of them a very large storage vessel was discovered in situ. It represents the largest vessel found on the site to date and is almost complete with only the rim section missing. A surprise came in the discovery amongst the building remains of a grave with no burial goods (grave 33). This burial represents the known northernmost extent of the cemetery on the Eastern Kom. Other than pottery vessels, numerous clay plugs and clay seals [Fig. 6], some covered in hieroglyphs, were also found, as well as a complete flint knives.

The excavation of trench section E83 began at a level of about 2 m below that of neighboring E84 (the topmost 1 m of fill at the tell edge being removed previously by the *sebakhin*). The most recent layers to survive in this area date from the beginning of the Early Dynastic period. These correlate to the level on which a round building was discovered in E93. The upper layers yielded the remains of buildings with thick, solid walls, whilst further down numerous kilns, often with vessels or pot stands inside them, were recorded.

## SOUTH TRENCH

Work carried out in 2001-2003 concentrated primarily on square 54, the southeastern quarter of which was excavated in full during this period. In 2004, the trench was extended to include the squares immediately to the north and west

(53-73; 64-74), the key objective being to determine the northern boundary of the cemetery located here and its relation to the settlement structures recorded in the North Trench.

The settlement features discovered in square 74 and the northern end of 64, and dated on pottery grounds to the transition between the Early Dynastic period and the Old Kingdom, consisted of a series of very badly damaged, narrow, mud-brick walls outlining a number of small, rectangular and circular rooms. The best preserved structure of this type (feature 13) was discovered at a depth of 20-30 cm below ground level. It comprised a minimum of six sub-rectangular rooms, surrounded by narrow and very poorly built walls. The westernmost room in the building was circular and may have served as a small silo. All of the rooms were small and were probably used for storage rather than habitation. Large quantities of pottery were recovered from this building, including two substantial storage vessels: one standing in a wall and the other at the building's southern perimeter.

In the lower, older deposits the building took on a more regular form [*Fig.* 7], comprising long and narrow rectangular rooms oriented roughly N-S. A round room abutting the building on the south probably served the same purpose as the one previously described. These strata also yielded a vessel standing upright in one of the rooms.



Fig. 6. Eastern Kom. Clay sealing with hieroglyphic inscription (Photo R. Słaboński)

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The archaeological material beneath this building was in an even poorer state of preservation, consisting of a few relict walls not forming any regular shape, ash deposits, hearth remains, and a large number of irregularly spaced postholes.

Noteworthy artifacts, other than pottery, included so-called cones and seal impressions dating from the transition between the Early Dynastic period and the Old Kingdom.

A further 19 graves belonging to the cemetery were discovered this season. They fell into three distinct groups: richly furnished graves with brick surrounds occupying the southern end of the burial ground; moderately rich graves with brick surrounds lying in the central section of the cemetery; and poor pit graves, most of them located in the northern end of the burial ground and devoid of any grave furniture.

## RICH GRAVES

Grave 24 [*Fig. 8*] lay at the southernmost edge of the cemetery section excavated this year and represented the only truly richly furnished grave. It was a single chamber burial measuring 2.46 x 1.60 x 1.35 m, surrounded by a single row of mud-bricks laid end to end. The skeleton of a female (20-25 years old), like all human bones on Tell el-Farkha, was very

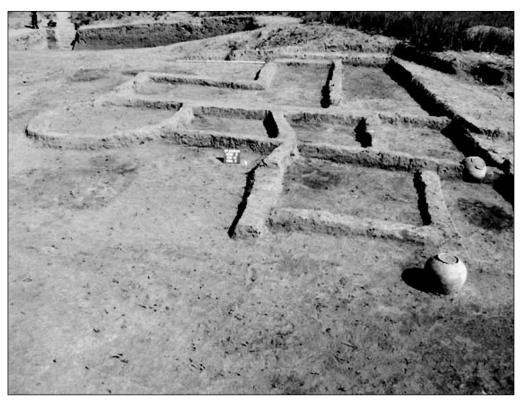


Fig. 7. Eastern Kom. Early Dynastic mud-brick structures (Photo R. Słaboński)

poorly preserved, possibly disarticulated; it had lain probably on its left side with the head to the north.

Grave goods consisted of 24 vessels of various sizes. Large vessels stood in a group by the south wall of the grave, whilst smaller ones were positioned by the north wall. In the central section of the grave lay a deposit of bone artifacts: miniature cylindrical vessels (at least three) and fragments of bone figurines, three of which depicted fish. Next to these there were two bone awls, one of which survived intact. The remains of mats, which would have covered the burial goods and lined the sides of the grave, were also recorded.

Grave 26 was a single chamber burial measuring 2.06 x 1.10 x 0.63 m, surrounded by a single row of mud-bricks laid end to end. It had probably been looted, as some of the pottery was found at its edges. The surviving grave goods consisted of 19 vessels, a flint knife, 19 stone beads and animal bones. The body of a male (35-40 years old) lay in strongly flexed position on its left side, with the head to the north. Some of the pottery was positioned on a type of bench surrounding the body. The largest vessels stood on the north side of the grave, concealing beneath them several smaller vessel, and the remainder were spread around the other sides.

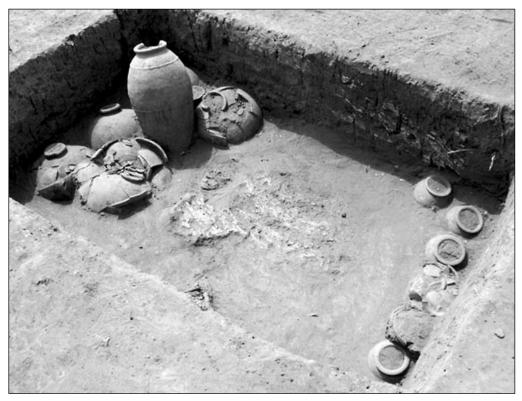


Fig. 8. Eastern Kom. Grave 24 (Photo R. Słaboński)

## MODERATELY RICH GRAVES

Grave 12, probably looted, consisted of a single chamber burial measuring  $1.80 \times 1.00 \times 0.61$  m, surrounded by a single row of mud-bricks laid end to end. The skeleton of a male (20-25 years old) was incomplete and disarticulated. The head pointed south. The grave yielded six, mostly damaged, vessels and one stone bead. Sherds of one of the bowls recovered from this burial fitted with fragments found in a neighboring grave (No. 20).

Grave 20 would have made the rich category were burial goods the only criterion; its size, however, and location led to it being classed among the moderately rich graves. It was a single chamber grave measuring  $1.80 \times 1.14 \times 0.95$  m, surrounded by a single row of mud-bricks laid end to end. The body of a male (40-45

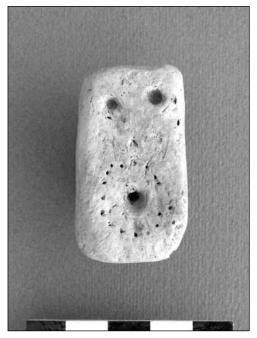


Fig. 9. Eastern Kom. Clay idol from Grave 20 (Photo R. Słaboński)

years old), poorly preserved, was placed on its right side in flexed position, with the head to the north. Burial goods comprised 18 vessels, a ceramic idol [Fig. 9], fragments of a vessel lid and an unidentified stone artifact. A noteworthy feature of this grave was the arrangement of the pottery in two layers: just below the surface of the grave, clearly above the skeleton, were two large storage jugs and several smaller vessels, whilst at a lower level, directly next to the legs of the individual were a number of fairly small vessels. A relatively large variation in vessel forms was noted, the most interesting examples including two red-burnished bowls, a large oval dish, a wine-jar with pot-mark and smaller vessels of various shapes.

Grave 21 [Fig. 10] belongs to the single chamber grave class, measuring 2.60 x 1.28 x 1.06 m, and surrounded by a single row of mud-bricks laid end to end. The poorly preserved body of a male (35-40 years old) lay in strongly flexed position on its left side with the head to the north. Burial goods consisted of 10 pottery vessels, a stone vessel fragment and animal bones probably representing the remains of a food offering. This grave had not been looted and showed no signs of either the goods or the skeleton having been disturbed. Part of the superstructure, or perhaps a thick brick roof protecting it from the top, had also survived. The burial goods were arranged along the two shorter sides of the grave: three large storage vessels of the wine-jar variety stood at the southern end, and seven other, smaller vessels, mostly medium-sized jugs, at the northern end.

It was probably during the construction of this grave that the one below it (Grave 14) was damaged. The latter was partly excavated last season, when its southern

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Fig. 10. Eastern Kom. Grave 21 (Photo R. Słaboński)



Fig. 11. Eastern Kom. Grave 30 (Photo R. Słaboński)

end was exposed and a human skull placed in a bowl next to a jug lying on its side was discovered in the southeastern corner.

Grave 23 comprised a single chamber burial, built rather crookedly, measuring  $2.50 \times 1.26 \times 0.76$  m, surrounded by a single row of mud-bricks laid end-toend. It contained a double burial: of a female (20-30 years old) and a juvenile (15-18 years old). The skeletal material was so poorly preserved that it was difficult to ascertain even what position the bodies had been laid in, presumably the typical flexed position on the right side with head to the south. Grave goods consisted of eight pottery vessels, one of them containing a dozen-or-so steatite beads. A badly corroded fragment of a copper object, probably a pendant of some kind, was found on top of the human remains. The two largest vessels, both of which had had simple pot-marks incised on them after firing, were placed by the south wall of the grave. Five smaller vessels were found next to the north wall. A red-burnished bowl had been placed on top of one of the skulls.

Grave 27 was again a single chamber burial measuring  $1.50 \ge 0.86 \ge 0.38$  m, surrounded by a single row of mud-bricks laid end-to-end. The body of an adult male was positioned on its left side with the head pointing south. The bones, however,

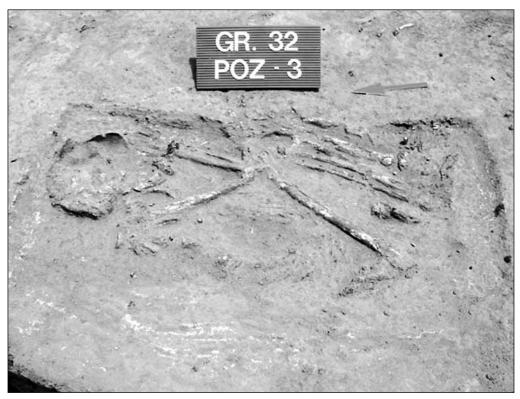


Fig. 12. Eastern Kom. Grave 32 (Photo R. Słaboński)

did not appear to lie in anatomical order, even though the grave did not seem to have been looted. Only one small vessel was found in the grave.

Grave 29 was a single chamber burial measuring  $1.50 \ge 0.78 \ge 0.18$  m, surrounded by a single row of mud-bricks laid end-to-end. The body of an adult female lay in flexed position on its right side with the head to the south. A single stone bead was found with the body.

Grave 30 [*Fig. 11*] was like all the others a single chamber burial measuring  $1.90 \times 1.06 \times 0.57$  m, surrounded by a single row of mud-bricks laid end-to-end. This poorly built grave with crooked side walls was that of a male (20-25 years old), buried on his left side in flexed position, head pointing north. Grave goods comprised three pottery vessels placed by the north and south walls and a clay seal fragment.

#### POOR GRAVES

Graves 11, 17, 18, 22, 25, 28, 31, 32 [*Fig.* 12], 33 were all pit burials (0.70-1.02 x 0.32-0.66 m) with no grave goods,

containing strongly flexed and very poorly preserved skeletons, laid typically on the left side with head to north or west. In two cases (Graves 18 and 22) the position of the skeleton was on the right side with head to east or north. There was one child's grave and one double grave of a man and woman.

**Grave 19** apparently contained only the skull of an adult male? interred face up in a pit measuring 0.20 x 0.16 m.

In three cases, evidence was recorded of mats lining the pits and covering the bodies. Most of the interred were males and females in their early twenties with a few falling in the 35-45 years age group.

In summary of four years of excavation on the Tell el-Farkha cemetery,<sup>4</sup> it may be said that in the vast majority of cases a selective location of graves was practiced. The richest burials appear to be grouped at the southern end of the cemetery and the moderately rich graves occupy the middle section. The poor graves were concentrated toward the northeast, where features dating from the end of the Early Dynastic period and the beginning of the Old Kingdom had started to encroach on the burial ground.

<sup>4</sup> Cf. previous reports in PAM XIII, Reports 2001 (2002), 113-117; PAM XIV, Reports 2002 (2003), 106-109; PAM XV, op. cit., 106-107.