# TELL QARAMEL EXCAVATIONS, 2002

## Ryszard F. Mazurowski

The fourth season of excavations at Tell Qaramel took place from April 10 to May 20, 2002.<sup>1)</sup> The season was devoted to a continued exploration of the Pre-Pottery Neolithic A settlement located on the lowest part of the southern slope of the tell in squares K-6 a, c, K-5 b, d, L-4 a, c. The discovery of a "grill-building" necessitated the extension of the trench into squares L-3a, K-4 b, d and K-3b. New trenches K-7, K-6 b and L-6 a were opened east of square J-7 b, d, where the ruins of a PPNA circular tower had been found and excavated to the level of the foundations in the previous season. In order to reach the eastern half of this tower (and potential elements of a defense system) it was necessary to remove the 2-m thick accumulation representing later occupation from the Bronze and Early Iron ages.

1) The project is a joint undertaking of the Polish Centre of Archaeology of Warsaw University and the Direction Générale des Antiquités et Musées of Syria, with substantial support from the Institute of Archaeology of Warsaw University. The Mission is indebted to the then Director General Dr. Abdel Razzaq Moaz for his unfailing help, kindness and interest. Words of thanks are also due the staff of the Regional Directorate of Antiquities in Aleppo and its Director, Dr. Wahid Khayyata, in particular.

The campaign was co-directed by Prof. Dr. Ryszard F. Mazurowski and Mr. Bassam Jamous (DGAM). The excavation staff included, on the Polish side: Mr. Marcin Białowarczuk, Ms Małgorzata Chacińska, Ms Joanna Gawrońska, Mr. Artur Grabarek, Ms Ewa Hander, Ms Katarzyna Januszek, Mr. Piotr Karczmarek, Mr. Rafał Kopcioł, Mr. Jerzy Wierzbicki, archaeologists and students of archaeology from the Institute of Archaeology of Warsaw University, and Mr. Andrzej Reiche, archaeologist and photographer, from the National Museum in Warsaw. Members of the team on the Syrian side included Mr. Yusef Al-Dabiti, engineer, from the Regional Directorate of Antiquities and Museums in Aleppo and Ms Maria Jodat Darius, student from Aleppo University, training in pottery drawing.

## SQUARE K-7

Square K-7 constitutes an extension to the east of the excavated part of square J-7 and borders on the south with K-6 a (cf. *Fig. 1*). The ground surface had eroded away to-

ward the east and south, dropping by approximately 80 cm. Consequently, nothing remained of the uppermost levels anywhere but the western part of the trench.

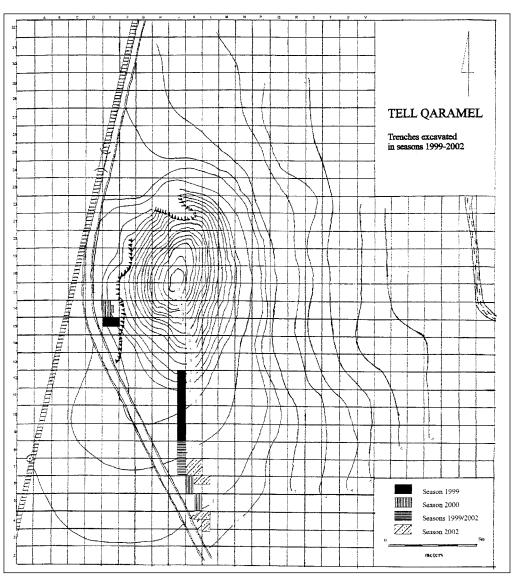


Fig. 1. Plan of the tell with trenches excavated in the 1999-2002 seasons (Drawing after R. Maskowicz)

#### STRATUM I

All three levels belonging to this stratum were dated on the evidence of the pottery to the Iron Age II and III (c. 1000 to 700 BC). The material included such characteristic Iron Age fragments as rims of redslipped burnished bowls and plates, as well as rim fragments of hole-mouth cooking pots. Some younger pottery – Hellenistic and Late Roman – was also present in the topsoil material.

Separate fragments of stone foundation walls (W1, W11, W2) but no floors were unearthed in the second of the levels in this stratum. An oval pit, c.  $2.5 \times 2.15$  m (loc. 11) was excavated by the east baulk

(*Fig. 2*). Lining it on the north was a single row of stones set into an ashy fill of an older pit (loc.16) cut by this pit, while on the east and south it was delimited by what was left of the stone wall of a room. The bottom of this pit was covered with a c. 6-8 cm thick layer of whitish ashes which extended up the walls some 20-25 cm.

More remains of stone foundation walls (W4, W5, W7, W8 and W9), as well as two pits (loci 1 and 8) were found in the next level in the western and northern part of the trench. Another poorly preserved part of a dwelling occupied the northeastern corner of the trench (walls W7, W8 and W9 and loc. 4).

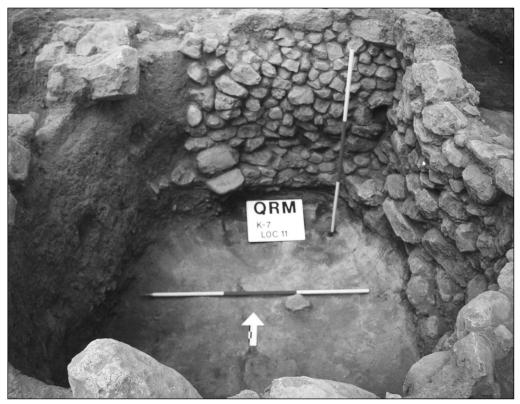


Fig. 2. Square K-7. General view of locus 11 (Photo R.F. Mazurowski)

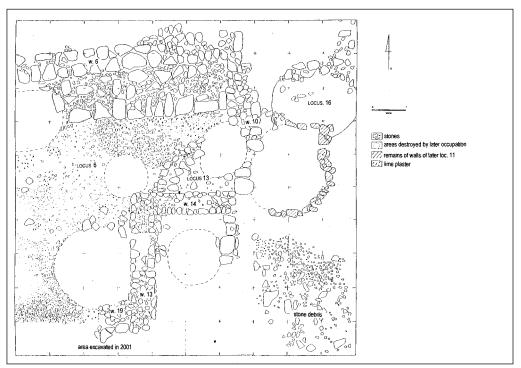


Fig. 3. Square K-7. Plan of features appearing in stratum II, level 3 (Drawing A. Reiche and J. Wierzbicki)



Fig. 4. Square K-7. General view of stratum II, level 3, seen from the west (Photo R.F. Mazurowski)

#### STRATUM II

A substantial architectural unit possibly dating from the Late Bronze or Early Iron Age was uncovered in level 3 (Figs. 3,4). The main feature of the structure was a large courtyard paved with pebbles and cobblestones, and covered with whitish lime plaster (loc. 6: 9.20 m E-W and 12.8 m N-S). Foundation walls of stone were identified around it on the north, east and part of the south side (W6, W10, W14, W13 and W19). There was an entrance, 1.10 m wide and equipped with a door socket and large threshold stone, in the east wall (W13). A stone platform foundation, c. 0.25 m high, lined the north wall, just inside the entrance; it was 1.20 m wide and at least 5 m long. The pavement and walls had been damaged substantially by Iron Age pits.

#### STRATUM III

A hiatus occurred between the upper levels and the structures of level 4; it was characterized by a thick reddish layer of decayed mud-brick walls dated by pottery to the Middle Bronze Age.

The big rectangular pavement in level 4 (loc. 18), approximately 4 m E-W and at least 5 m N-S, was located in the middle and north of the square (*Fig. 5*). It was paved with small flat stones set in a layer of clay. Potsherds and animal bones were found littering the surface.

The walls around this pavement on the west, east and south (W25, W26, W29), as well as four other walls (W22, W24, W28, W30), obviously belonged to a multi-roomed house, parts of which had already been excavated in squares J-7 and

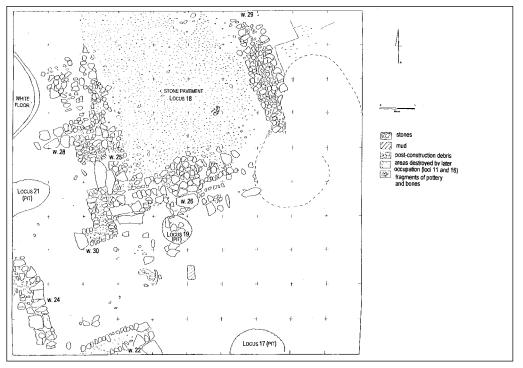


Fig. 5. Square K-7. Plan of features in stratum III, level 4 (Drawing A. Reiche, M. Białowarczuk)

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K-6. The walls were made of cobbles, pebbles and limestone slabs, varying in thickness from c. 0.6 m (W22, W24, W28 and W30) to c. 1 m (W26 and W29). The

construction was the same in all cases: wall faces made of single rows of bigger stones and slabs, the core filled with small pebbles and cobbles.

## SQUARE K-6 B/L-6 A

Only the uppermost layers were cleared this season. The pottery from the topsoil dates to the Iron Age, while the few remnants of stone structures, corresponding to the features unearthed in square K-7, are of the Bronze Age.

### SQUARE K-6 A,C

The three occupational levels (layers XI-XIII) investigated this season correspond to the early phases of PPNA on the site. The younger settlement level (layer XI) is connected with the oval house (loci 19-22) discovered last season.<sup>2)</sup> Further explorations inside this structure revealed the floor made of small stones and covered with tamped mud (*Fig.*  $\theta$ ). Outside the house there was a pit with burned stones and stone hearths.

This house had been built on top of an older structure (loc. 23), which represented a lower occupational level (layer XII). It was

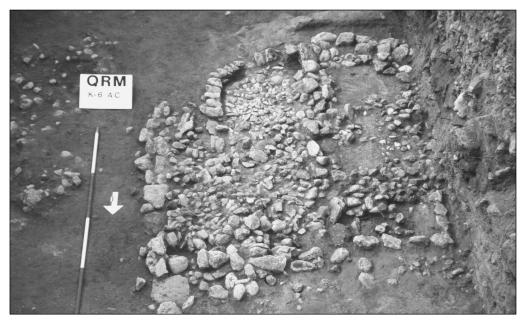


Fig. 6. Square K-6 a,c, bottom of layer XI. Lower part of the oval house (loci 19-22), after pulling down a later mud wall. View from the north (Photo R.F. Mazurowski)

<sup>2)</sup> For last year's work in the oval house, cf. R.F. Mazurowski, PAM XIII, Reports 2001 (2002), 299 and fig. 3 especially.

wider to the east, the oval wall being made of large stones covered with a thin layer of mud. This one-room house had a floor of small stones and mud mixed with splintered animal bone, except for the southwestern part which appeared to be paved with large flat stones, spread with a 2-cm thick layer of mud. A discharge channel cut under the east wall (*Fig. 7*), ran toward a reservoir situated some 0.5 m farther on (partly destroyed by an Early Bronze Age pit).

The next occupational level (layer XIII) was represented by three houses. Loc. 25 was an older phase of loci 19-23 and was divided into two oval parts, itself standing on older house remains. The stone-and-mud walls showed signs of repair. An ovoid hearth consisting of two layers of large stones was found in one of the compartments of this house.

Of the house designated as loc. 24 not much can be said as most of it was destroyed; the surviving parts revealed a 5-cm thick floor and walls made of stones and mud. As for house-locus 26, it appears to have had three rooms: two semi-oval cubicles and a bigger oval room surrounded by a wall erected of lenticular mud blocks covered with plaster. The foundations of the house were of stone, as were the walls of the cubicles, which were additionally mudplastered. An outdoor hearth stood to the north of the house.

Explorations stopped on top of layer XIV with the outlines of another oval and a round house apparent. These may represent the oldest PPNA occupation on the site or perhaps a developed Proto-Neolithic horizon.

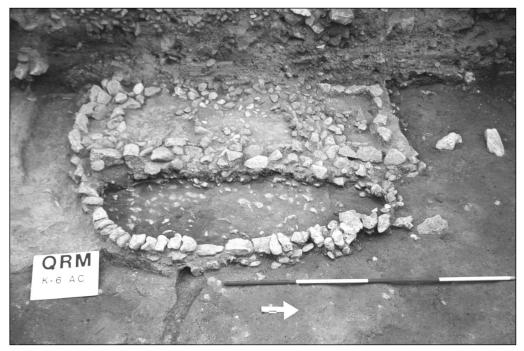


Fig. 7. Square K-6 a, c, layer XII. The oval house (locus 23) with the sewage system visible under the east wall. View from the east (Photo R.F. Mazurowski)

#### SQUARE K-5 B,D

Explorations in this section reached virgin soil at c. 3.5 m below the surface, uncovering in the process three occupational levels dating to the early and middle phases of the PPNA period.

The oldest occupational level yielded an oval house, loc. 25 (*Fig. 8*) and sixteen pits situated to the east of it, all on virgin soil. The house was c. 2.5 m in diameter with walls 0.3-0.4 m thick, rising now to a height of 0.3 m. The construction of the walls called for a framework of vertically positioned pebbles filled in with blocks of red mud. The floor was of tamped mud and in the northern end a fragment of a bench made of yellow mud was discovered.

Of the younger structures in this square loc. 19, which is conceivably from Proto-

Neolithic or very early PPNA times, partly cut into the older house and was partly destroyed in turn by loc. 6 from the EB IV period. It was oval, too, in plan, measuring 2.5 m across, and very similar to its predecessor with the same kind of mudblock and pebble technique of construction. The walls were 0.3-0.4 m thick, rising to a height of 0.4 m. The floor was paved in stone.

The two other contemporary features (loci 24 and 31) were small and oval, 1.2 m across, made of trapezoidal mud blocks and with a floor of white gypsum or chalk. The fill consisted of burned bones and charcoal. The most recent level excavated this year goes back to the mid PPNA period and was represented by an oval house (loc. 23)

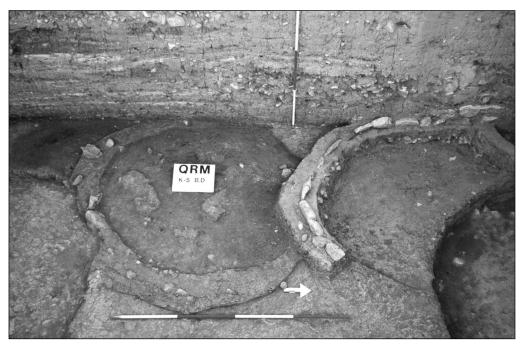


Fig. 8. Square K-5 b,d. The oldest hitherto discovered house from the aceramic village (loc. 25), damaged by the later loc. 19, on the right (Photo R.F. Mazurowski)

with subsidiary units to the north of it (loci 27, 28, 29, 30), partly destroyed by younger structures. The diameter of this house was approximately 5 m. The walls were partly dug in the ground, made of big pebbles set up on end and blocks of mud. The floor, about 3-cm thick, consisted of tamped white gypsum or chalk; it had been laid c. 0.4 m below the footing of the wall. A bench, surviving to a height of c. 0.2 m, was identified in the southern part of the interior; it was made of mixed white gypsum or chalk and red mud. The subsidiary units were probably oval and c. 2 m in diameter.

Evidence of Early Bronze IV occupation appeared in the southern part of the square where a grave of a young man (loc. 18) was discovered. The body had been laid on the right side in embryonic position, the head to the west and facing north. The grave furnishings included three complete clay vessels: a jar, a bowl and a small cup.

## SQUARES L-4 A,C, L-3 A, K-4 B,D, K-3 B

Square L-4 a,c is at present the lowermost excavated part on the southern slope of the mound, southeast of square K-5 b,d. Two occupational levels (layers I-II) were investigated, the second of the two contain-

ing the ruins of a unique "grill house" (loc. 10, *Figs. 9, 10*), partly extending into the neighboring squares (L-3 a, K-4 b,d, K-3 b). It does not, however, correspond strictly to the "grill houses" known from



Fig. 9. Square L-4/L-3a. The "grill house" viewed from the south (Photo R.F. Mazurowski)

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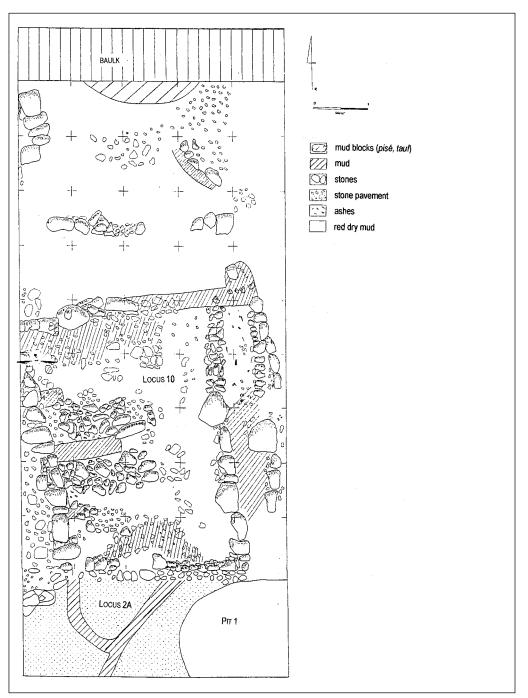


Fig. 10. Square L-4/L-3a. Plan of the "grill house" in layer II (Drawing J. Gawrońska)

the late phase of PPNA and from the PPNB in the Taurus Region (Cayönü Tepesi, Cafer Höyük). The central part consists of an oval structure built of large stones, oriented NW-SE, about 5.5 m long and 4.5 m wide. A rectangular grill construction (5.0 by 5.0 m) was slotted into the east wall. Conceivably, a parallel construction could have been inserted into the wall west of the oval central part.

Younger than the "grill house", which represents one of the younger phases of the PPNA horizon on the site, are two round roasting pits discovered above the "grill house" in square K-4 b,d. The pits had very regular walls made of double rows of stones, analogously as in levels VII-XIII at

### THE FLINT INDUSTRY

Three techno-chronological horizons can be distinguished in the flint industry on the site. The oldest corresponds to the early phases of PPNA (Fig. 11). Not one core came from this horizon; even so, virtually all of the blades were made from single polar cores. Some of them were hit. The flakes and blades were generally very small, not exceeding 6-7 cm in length. El-Khiam points were the only type present, but in many varieties. The tools inventory included also end-scrapers, burins, retouched flakes and blades. About 90% of the artifacts were made of brown "chocolate" flint. Other kinds of flint are present sporadically, obsidian is absent altogether.

The middle and late phases of PPNA occupation were represented by the next and most numerous horizon. Of the three types of cores present the prevailing one was a single-polar conical core for producing blades and small flakes. The bipolar forms were very similar to "navy-core" forms for producing long, slender blades. Both Qaramelian types had platforms Mureybet (numbering of levels after M. van Loon). A large basalt mortar was found on a floor to the west of one of these pits.

The roasting pits were damaged by later PPNA oval houses, but an even younger PPNA horizon – the youngest ever found at Tell Qaramel - was discovered in squares K-4 b,d/K-3 b. It was represented by fragments of two rectangular houses (3.5 by 5.0 m, loci 1 and 2) with walls made of mud-blocks and sun-dried loaf-shaped bricks, and the white and yellow floors of a soft limestone mass spread over a stone substructure. Under the floors three complete burials and two human skulls without any grave goods were found.

prepared by one hit. The third category covered splintered pieces, but these were fairly rare. Among the flakes and blades, long specimens (about 10 cm in length) appeared to have a slight prevalence, but small and subtle ones also occurred.

For this second horizon points were the most popular group in the tool inventory. They were mostly of the Helvan type, but Jordan Valley points and El-Khiam points also occurred, and two Mureybet points, one of obsidian, were found this season. Characteristically, these two points came from the layer with the two rectangular houses, that is, from the final stage of PPNA on the site.

Other major tool groups include burins, sickle blades and end-scrapers, which are sometimes very big, made on massive flakes with cortex and also very small, made on blades. The microliths interestingly included several Netiv Hagdud and Gilgal truncations. Over 95% of the tools were made of "chocolate" flint. Obsidian is generally very rare in all of the PPNA settlement at Qaramel.



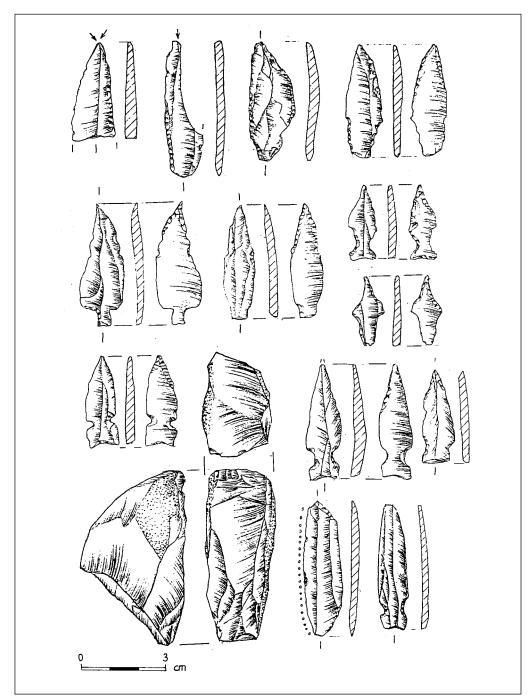


Fig. 11. Examples of the early PPNA flint industry (Drawing E. Hander)

The hard-stone hammer technique and pressing technique were used commonly for core preparation; the heating technique was also used.

The youngest horizon belonged to the late phases of the Early Bronze period.

GROUND AND PECKED STONE INDUSTRIES

The ground and pecked stone industry assemblage from the current season was much less numerous than in earlier years (*Figs. 12-13*). This is directly connected with the chronology of the features excavated this year. Indeed, the results (uncalibrated) of radiocarbon dating of samples from both trenches suggest that settlement at Qaramel started about the middle of the ninth millennium BC or a little bit earlier.

The number of forms of stone artifacts was evidently lesser in the older horizons of aceramic occupation. Actually, the only pieces include fragmentary basalt querns IIB1a, grinders IIIE1a, IIIE2a, IIIE2b, pestles IIIA1 or IIIA2 made of chlorite and some celts VIIA1a or VIIA2a (also decorated), awls XIC2, fragments of decorated bowls XIVA2, single beads XVIA1, XVIA2a, XVIA3a and circular quern-like forms IIA1 characterized by very thorough treatment and highly aesthetic finishing, which distinguishes them from querns.<sup>3)</sup>

Stone artifacts were often reused in wall construction. The oldest decorated shaft straightener XVC made of gray-brown chlorite was found in pit 20 (square K-5 b,d), in just such a position, nearly on virgin soil. Its primitive decoration including three parallel grooves has Flakes and blades were of a large size. They were made of several platform cores. The typical forms for this horizon are retouched flakes and blades, and occasionally primitive scrapers made of "chocolate" flint by the hard-stone hammer technique.

analogies in the Natufian tradition and is different from motifs found on forms from the younger PPNA layers at Qaramel (cf. *Fig. 13:6*).

In the youngest horizons of PPNA settlement (squares L-3 a, K-4 b,d, K-3 b and partly K-6 b,d), the number of ground and pecked stone artifacts increased. Mortars and pounders remained rare. Several of the celts were decorated with incisions, grooves or grooves with small triangles (cf. *Figs.* 12:1,2; 13:1,3,8). Several complete and fragmentary decorated shaft straighteners XVB and XVC were also unearthed (cf. *Figs.* 12:3; 13:5,6). One fragment has a very complicated ornament showing probably a gazelle and the end of arrows with zigzag lines, which is typical of many forms XVB and XVC discovered during the past two seasons (cf. Fig. 12:3).

A snake representation made of soft limestone is particularly interesting (cf. *Fig. 12:10*). All the anatomical details have been shown in a realistic manner. The incised arrows on its head and on the transition from head to body are identical to the motifs that are well known from the shaft straighteners (whetstones) and plaquettes that were so popular in the Tell Qaramel settlement of the PPNA period.

<sup>3)</sup> Classification after R.F. Mazurowski, Ground and Pecked Stone Industry in the Pre-Pottery Neolithic of Northern Iraq (Warsaw 1997).

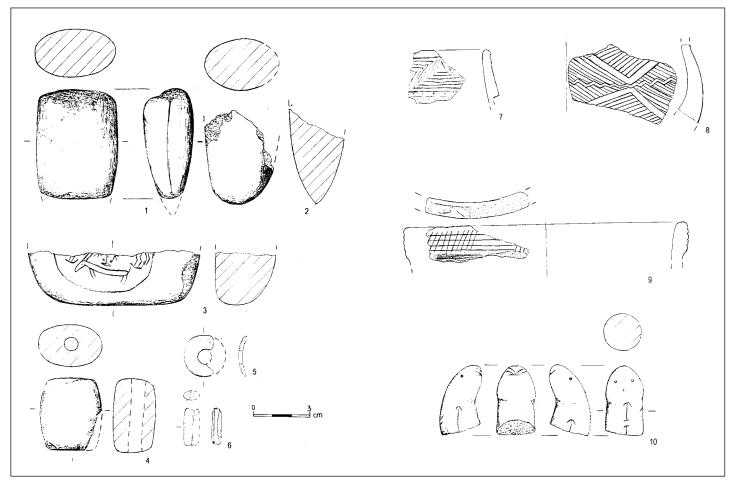


Fig. 12. Stone artifacts from the PPNA layers, including stone vessels (7-9) and a fragmentary snake figurine made of soft limestone (10) (Drawing E. Hander)

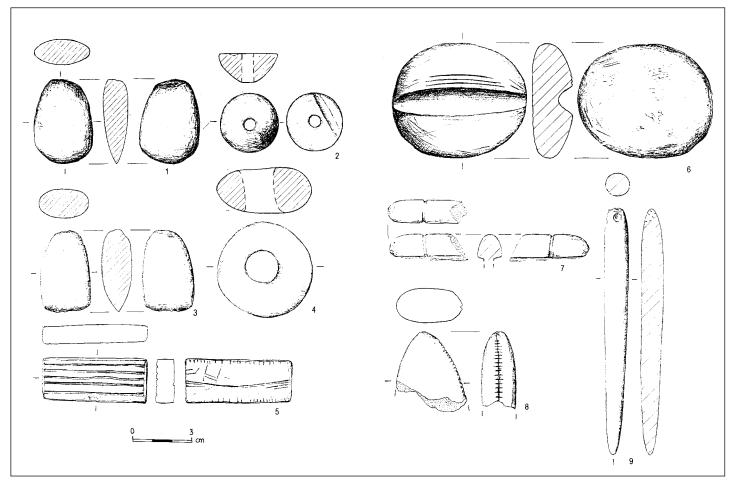


Fig. 13. Stone artifacts from the PPNA layers (1, 3-5, 7-9), Proto-Neolithic (6) and younger periods (2) (Drawing E. Hander)

#### ANIMAL BONES

Animal bones constituted the largest category of finds, this season as well as in the previous one. Virtually all originated from the PPNA layers. A provisional identification of species (pending examination by a paleozoologist) showed wild cattle (*Bos taurus*) and sheep/goat as predominating. Horse and donkey bones are still present. Wild boar, predators,

birds, fish and shells of snails (*Unio sp.*) were also quite common in the PPNA layers. Post-consumption traces were noted on some of the bones, i.e., cutting, deliberate crushing and processing in high temperature.

Bone tools were very rare – mainly perforators made of wild cattle or sheep/goat long bones.

#### CONCLUSIONS

Tell Qaramel is one of the most important archaeological sites for understanding the beginning of plant and animal domestication and the origins of architecture in the Northern Levant and neighboring regions of the Near East.

In the past two seasons no less than 23 circular or ovoid houses, mostly built on the surface and in one occupational horizon, have been discovered. Together with other remains, they represent the complete sequence of development traditionally referred to as Proto-Neolithic and Pre-Pottery Neolithic A. The oldest houses and relevant layers and pits contain an assemblage, especially the chipped (flint) industry and ground and pecked stone industries, that is typical of the El-Khiam horizon. In the light of radiocarbon dating, the oldest occupation at Tell Qaramel can be said to go back to the mid 9th millennium BC. The youngest phase of the PPNA tradition at Tell Qaramel is represented by the "grill house" and the rectangular houses in the layers above it. To date, no flint implements typical of the PPNB horizon have been found at Qaramel.