

ARCHAEOLOGICAL RESEARCH IN THE BISHRI REGION — REPORT OF THE FIFTH WORKING SEASON —

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INTRODUCTION

The fifth working season of the Syria-Japan Archaeological Joint Mission to the Bishri Region started on March 3 and ended successfully on April 5, 2008. The members of the joint mission from the Syrian and Japanese parties were as follows:

Syrian party: Anas Al-Khabour (Director), Ayham Al-Fahry, Mohamad Ali Jajan, Ahmad Sultan.

Japanese party: Katsuhiko Ohnuma (Director), Sumio Fujii, Takuro Adachi, Kae Suzuki, Lubna Omar, Takeshi Saito, Kazuhiro Tsukada, Hirotochi Numoto, Yoshihiro Nishiaki, Shogo Kume, Seiji Kadowaki.

First of all, we would like to express our sincerest gratitude to Dr. Bassam Jamous, Director General of the Syrian Directorate General of Antiquities and Museums, and Dr. Michel Al-Maqdissi, Syrian Supervising Adviser for this joint mission and Director of Archaeological Excavations and Research at the Syrian Directorate General of Antiquities and Museums, whose warm-hearted cooperation was essential to the success of this field season.

The objective of this field season was manifold. To begin with, we conducted a limited sounding at Rujum Hedaja 1, a large cairn field on the northern flank of Jabal Bishri, with a view to exploring the pastoral background of the EBA society in the middle Euphrates river basin. The second objective was to analyze faunal remains from Tell Ghanem al-'Ali. Third, we carried out a reconnaissance survey of shaft tombs around the village of Ghanem al-'Ali, in order to shed light on the funerary aspect of the EBA settlement of Tell Ghanem al-'Ali. Fourth, we made a geological investigation around Tell Ghanem al-'Ali, which addressed the stratigraphy of the basal part of the tell. Fifth, we undertook intensive surveys of archaeological sites in an effort to clarify the EBA land-use patterns around Tell Ghanem al-'Ali and Tell Hammadin and also to gain further records of population history in this region since earlier times. It is needless to say that these operations were intended to contribute to a better understanding of the archaeological implications of Tell Ghanem al-'Ali, the main target of our mother project. The following are brief summaries of the five operations.

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The Research Area

1. A BRIEF SOUNDING AT RUJUM HEDAJA 1

Sumio FUJII (Professor, Kanazawa University)

A brief sounding at Rujum Hedaja 1, a large cairn field on the northern flank of Jabal Bishri, was conducted for about three weeks from March 3 through May 20 of 2008. The objective of this short-term investigation was to shed new light on the pastoral background of the EBA society in the middle Euphrates river basin. The investigation revealed a large cist-type burial cairn with a double enclosure, which may be tentatively dated, on the basis of a line of evidence referred to below, to the Bronze Age, its final phase in particular.

The Site and Site-setting

The site of Rujum Hedaja 1, or RHD-1 in our site registration code, is one of the four cairn fields (i.e. clusters of cairns) that were first found in our general survey conducted in May of 2007 (see our previous report). It was located on a flat-topped limestone hill ca. 5 km east of Bir Rahum, a small village that was newly founded along a local main road in the latter half of 1970s (Fig. 1.1). This table-like hill is ca. 30–50 m higher than the surrounding terrain and protruded westward for ca. 1 km, thereby commanding a fine panorama of the Bir Rahum area (Fig. 1.2).

Our previous survey had confirmed that the site contained a total of fourteen burial cairns, and that most of these were lined along the southern edge of the flat hilltop. This suggested a possibility that a long techno-typological sequence within the same site would be established. In addition, they included some large-scale, relatively well-preserved examples that were often accompanied with small features. It is for these reasons why we embarked on the sounding of the site. The accessibility from the local main road was also among the reasons for the site choice.

The Sounding of BC-10

Due to time constraints and an unexpectedly bad weather, the sounding of Rujum Hedaja 2, another site scheduled for investigation, was postponed until the next field season. Instead, our sounding focused on Burial Cairn No. 10 at Rujum Hedaja 1 (or RHD-1/BC-10). It was one of the largest and best-preserved burial cairns, being located at the western edge of the site.

The sounding was conducted based on a 5 m by 5 m grid and locus system that covered BC-10 and some of its surrounding features. In order to combine the efficiency of investigation and the preservation of the site, we adopted a half-cut excavation method along the north-south axis passing through the center of the mound. Since no triangle point was available nearby, a bench-mark was set up arbitrarily at the center of the grid system. Its elevation is estimated ca. 550 m according to a geographical map published in Syria.

We employed up to ten local workers at Bir Rahum, whose diligent workmanship was among contributing factors for the success of this field season. The operation took place under the supervision of some qualified persons including Ayham Al-Fahry and Mohamad Ali Jajan, both representatives from the Raqqa branch office of the Department of Antiquities and Museums. Their sincere cooperation was also highly appreciated.

The Mound and Internal Structures

BC-10 consisted of a large mound and a few internal structures. The mound was pear-shaped in general plan, measuring ca. 15 m in the N-S major axis, ca. 13 m in the E-W minor axis, and ca. 1.2 m in relative height. It contained a large volume of undressed limestone cobbles up to ca. 30 cm long as well as rubble and silty soil. Similar cobbles covered the mound surface, probably a device to protect it from erosion. It appears that these construction materials were procured from the surrounding edges of the flat hilltop where similar stones are still abundantly available.

The half-cut excavation revealed the following three internal structures underlying the mound: a cist, an inner enclosure, and an outer enclosure (Fig. 1.3). All of these were constructed by means of a dry walling technique without using any mortar. Even small rubble as adjustment material was rarely used. This is not to say, however, that they were inferior in construction quality. As described below, the cist realized a height of ca. 1.2 m and the outer enclosure was elaborately finished using dressed chalky limestone cobbles.

The cist, a core feature of BC-10, occupied the center of the mound and had a pear-shaped plan with its round tip being oriented to the south. It was relatively large in size, measuring ca. 6.5 m in the NNW-SSE major axis, ca. 5 m in the ENE-WSW minor axis, and ca. 1 m in height. The floor size was a little smaller, being ca. 5.5 m in the major axis and ca. 4.5 m in the minor axis. Technologically, it was based on a rubble foundation layer ca. 0.2 m thick, on which the pear-shaped masonry wall, a single stone-row wide and up to five to six courses high, was constructed. The foundation course of the wall contained larger boulders up to ca. 70 cm long, which were usually arranged in stretcher bond. The upper courses, on the other hand, consisted of smaller stones arranged largely in header bond. The wall was slightly inclined inward partly due to the use of a header bond technique for the upper courses.

Interestingly, the cist incorporated four stone-lined rectangular chambers that were arranged crosswise (Fig. 1.4). In contrast to the cist wall, the chamber complex had an orientation slightly rotated clockwise from the four cardinal points. Unfortunately, they were subject to later disturbance, but a total of five concentrations of human skeletal remains were confirmed (Fig. 1.5). Due to the disturbance, the finds were limited to a few snail and marble objects and several pottery sherds, although the surface and upper fill layers produced a bronze fibula and a Roman coin.

The inner enclosure had a similar profile to the cist, being ca. 13 m in the NNW-SSE major axis, ca. 10 m in the ENE-WSW minor axis. Technologically, it was constructed with a masonry wall a

single stone-row wide and preserved up to a height of five to six courses or ca. 1 m. In comparison with the cist and the outer enclosure, it was much inferior in construction quality, suggesting its *ad hoc* nature. The use of both smaller and less standardized construction materials may also support this assumption. No entrance was found at least within the excavated squares.

Two small graves were found within a wide corridor sandwiched between the cist and the inner enclosure. Grave A was constructed leaning against the northern wall of the inner enclosure (Fig. 1.6), whereas Grave B against the eastern wall of the cist. Both of these interments took place on a semi-circle stone pavement fringed with larger stones, being covered with a small cobble mound. Grave A produced human skeletal remains only, but Grave B yielded a small bronze bracelet as well as a number of fragmented human bones (Fig. 1.7). Their casual appearance and peripheral location suggest that they were incidental burials associated with the main interment within the cist.

The outer enclosure was another highlight of this burial cairn. As with the other two components described above, it was also pear-shaped, being ca. 16 m in the NNW-SSE major axis, ca. 13.5 m in the ENE-WSW minor axis, and preserved up to a height of two to three courses or ca. 0.5 m. Two kinds of construction materials were used: partly dressed limestone boulders up to ca. 60–70 cm long for the foundation course, and finely dressed standardized chalky limestone cobbles for upper courses (Fig. 1.8). While the former was arranged in header bond, the latter were piled up on them in stretcher bond. What attracted our attention was the fact that the latter construction materials often retained traces of chiseling on their upper or lower surface, and that some dozens of examples were decorated with herringbone patterns (Fig. 1.9) or animal designs (Fig. 1.10). There is no doubt that these designs were engraved by means of metal implement. (Local workers provided the information that similar stones are available at a hill some kilometers south of the site, but we have not yet confirmed it.) In view of the volume of fallen examples, it appears that these elaborate construction materials were piled up at least to a height of a few courses. There is little doubt that such an attractive wall formed the outer edge of the original mound. Here again, no entrance was confirmed within the excavated squares, but it seems more likely that the two enclosures were not equipped with it from the beginning.

Surrounding Features

A total of fourteen small stone-built features were confirmed around BC-10. Some of these were substantially buried in the ground, suggesting the possibility that they were as early as BC-10. For this reason, the following three examples were excavated either entirely or partly.

What most interested us was Feature 01, an elongate wall ca. 75 m in total length that was located ca. 20 m to the east of BC-10 (Fig. 1.11). This wall, ca. 1 m wide and a single stone-course (or ca. 20–30 cm) high, was extended roughly in the north-south direction, crossing the western edge of the flat hilltop. Since fallen stones were scarce, it appears to retain the original height. Technologically, it was constructed with two rows of limestone cobbles with smaller rubble being compacted in between. Nevertheless, such a careful construction was limited to the southern half nearer to BC-10; the northern half was reduced into irregular stone alignments without any core fillings. Our limited excavation showed that it was roughly coeval with BC-10 in terms of site stratigraphy. Given this, it follows that BC-10 formed a complex accompanied by several small features including Feature 01. Aside from a few undiagnostic flint flakes, no finds were recovered. Nothing specific can be said about the function of this unique feature, but it may have served as a psychological boundary to delineate the sacred lot with BC-10 as the core.

Feature 05, being located ca. 10 m NE of BC-10, was a small oblong structure with a floor size ca. 1.8 m in the NNE-SSW main axis and ca. 1 m in the ENE-WSW minor axis (Fig. 1.12). It was constructed with a single row and course of upright stones that were arranged leaning against the side surface of a shallow pit ca. 0.2 m deep. It opened toward the NW, the lee side of the

predominant southerly wind in this area. This feature also turned out to be coeval with BC-10 in terms of site stratigraphy. Several flint cores and blades were found *in situ* on the floor, suggesting that flint production took place within the feature. In addition, a well-fired, fine textured, orange buff-coloured pottery sherd with pale buff wash occurred on the floor. It is our present view that this small feature provided a temporary shed or windbreak during the construction of BC-10.

Feature 06 was located ca. 3 m NE of BC-10 or ca. 5 m south of Feature 05 described above. It had much in common with Feature 05 including the stratigraphy, general plan, construction method, and orientation, although no *in situ* finds were recovered from this feature.

The Finds

Sine the cist was heavily disturbed, the *in situ* finds from BC-10 were scarce. Aside from a large number of decorated construction materials and human skeletal remains, they were limited to a dozen pottery sherds, several flint artifacts, five adornments made of bronze, snail or marble.

The pottery sherds fall into three groups (Fig. 1.13). The first group consisted of well-fired, finely-textured ware sherds with orange-buff core and pale-buff wash. They included an example decorated with a horizontal band of black paint. The second group was represented by poorly-fired, grit-tempered coarse ware sherds usually with light brown core and thick reddish-brown slip. The third group contained miscellaneous examples that do not belong to either of the two. It is noticeable that the first group included a small carinated bowl fragment with an everted rim, a trait that first appears in the EB-MB transitional period. In addition, the occurrence of a goblet probably with a collared rim also deserves special emphasis in that it may fall into the pottery repertoire of the final phase of the EB.

The flint artifacts contained retouched blades, a tabular scraper, an angle burin as well as a few blade blanks and undiagnostic flakes. They were difficult to date, but the existence of the tabular scraper suggests a date of the Chalcolithic or the EBA for this assemblage.

Of interest was a bronze bracelet from Grave B, which was ca. 6 cm in diameter and decorated with several incisions at both flattened ends (Fig. 1.7). Grave B also produced a small fragment of a bronze object, which was also probably a part of an adornment. The dating of these bronze artifacts must await further study, but it appears that the bracelet belongs to a relatively early stage of the Bronze Age. In addition to these bronze objects, a marble artifact and two snail products occurred at the cist (Fig. 1.14). All of these were perforated at their center, suggesting the use of beads. Many parallel examples have been reported from EB or MB sites along the middle Euphrates river basin.

Although it is difficult to date BC-10 on the basis of such a limited number of *in situ* finds, it seems that the *in situ* finds suggest, overall, a date from the final phase of the EB or the EB-MB transitional period. It is needless to say, however, that this remains a working hypothesis until further evidence is obtained.

In addition to BC-10, Feature 05 produced several pottery sherds and flint artifacts. They had much in common with the finds from BC-10, suggesting the synchronism between the two.

Concluding Remarks

The sounding at BC-10 of Rujum Hedaja 1 has shed new light on the archaeological implications of burial cairns that are concentrated on the northern flank of Jabal Bishri. Available evidence suggests that the area formed an extensive pastoral background of the final EBA society in the middle Euphrates river basin. This finding may open the way to approaching the specific picture of *Mar-tu* or *amurru*, the early pastoral population that Sumerian and Akkadian texts referred to as being based on the Jabal Bishri (or Basa'al) area. Nevertheless, the sounding of this season was too limited to address such a far-reaching issue. The next investigation, scheduled for June of 2008, is to try to grasp an overall picture of the site.

2. PRELIMINARY ANALYSIS OF FAUNAL REMAINS FROM TELL GHANEM AL-'ALI

Lubna OMAR (Doctoral student, The Institute of Cultural Heritage, Nara)

The main purpose behind the sorting of the faunal assemblage which has been retrieved during the excavation in November 2007, is to reconstruct the exploited animal resources at the site. During the excavation season at the site in August 2007 the first faunal remains appeared all over the excavated area. The assemblage was relatively small in size it consisted approximately of 300 specimens. This study focused on combining the results of the latest excavation with the previous analysis of the faunal resources at the site, in order to clarify the role of animals at the settlement.

Materials

The faunal remains belong to the main squares at the site, Square 1 and 2 where several architectural features have been revealed. These constructions date back to the early bronze period according to the pottery styles which were present at the site.

The bones have been retrieved by hand picking. The soil was not sieved which would affect the representation of the small mammals at the assemblage. The latest excavation produced around 450 animal bones, the preliminary analysis of these materials concentrated on identifying a sample of this collection. The sample consisted of 150 fragments.

Methods

The analysis of the faunal remains concentrated on determining the number of the identified bones in the assemblage and recording all sort of modification related with the economical activities which took place at the site, such as food processing activities, disposal, and trading and herd-keeping. It was not possible to record the weight of the different species present at the site.

It is an essential part of the analysis to observe the contributions of each species to the assemblage through the number of the bones and fragments and the weight of the bones, and it would be concluded in the next study.

Results

The studied sample of faunal assemblage showed that more than 96% of the bones belong to domestic animals category which was represented by sheep, goat, cattle, and domestic donkey. The wild animals which have been identified included the gazelle (gazelle subguttrosa), roe deer, hare, and possibly wild-ass.

The identification of the equid specimens requires better representation of the bones. Most of the post-cranial remains consisted of heavily fragmented elements, except for a complete tibia, which according to its small measurements falls in the domestic ass category.

Previous studies in Euphrates valley described the exploitation of the wild onager during the Bronze Age period in Tell Um-Al Marra, and the Tell Es sweyhat. The identification of equids is very substantial aspect of any zooarchaeological research in Near East area.

Some of the remains at tell Ghanem al-'Ali might belong to the wild species of Equids, but until we obtain better persevered elements we won't be able to get a complete picture of the exploitation of equids at Jabal bishri region during the Bronze Age.

Sheep and goats contributed more than half of the assemblage around 54% sheep was more present than goats.

Cattle followed the sheep and goat, and its remains formed more than 10% of the sample.

Sorting the materials of the winter season gave us the chance to observe new species which didn't appear in the previous seasons.

Shell was present in small numbers, and shaft of turtle long bone were retrieved from square 2.

The majority of the faunal remains belong to adult and sub-adult individuals. Unfused fragments were scarce, as for the teeth aging no deciduous or milk teeth were found.

Determining the age classes at the site requires a bigger collection of bones which could provide a non-biased view of the composition of the herds living at the site, or in the pastoral areas around it.

The same applies for indicating the sex of the animals at the site, several horn cores and one antler were retrieved, but these remains don't indicate a preference of a specific sex either in hunting or herding.

The distribution of elements at the site showed that hind and fore limbs were the most abundant at the site, but we should note that skull and mandible fragments were retrieved in considerable amount about 34% of the studied sample, while ribs vertebrae came at last.

Conclusion

This preliminary exam of the faunal materials at Tell Ghanem al-'Ali site indicated that the subsistence strategies which were practiced in this area focused on herding sheep, goat, and cattle. Hunting was a part of the diet and it depended on the steppe animals.

We are still waiting for the final interpretation related with the function of the structures at the site, in order to achieve a better understanding of the activities which took place in the discovered structures.

The distribution of elements proved that all type of bones were present at the site, but it's worth mentioning that the considerable number of cranial elements at the excavated area might indicate that this area was a disposal area, but still we can't confirm the function of the place without examining the complete assemblage.

3. A BRIEF SURVEY OF THE EARLY BRONZE AGE TOMBS IN THE WADI SHABBOUT AND THE WADI DABA AREAS

Hirotohi NUMOTO (Professor, Kokushikan University, Japan)

An one-day scanning survey for the Early Bronze Age (EBA) tombs was conducted in 25 March 2008. Goals of this brief survey were to illustrate an overview of the EBA tombs in the surroundings of Tell Ghanem al-'Ali, and to document conditions of looting activities in the areas.

Selected survey areas were two clusters of tombs situated in the Wadi Shabbout and the Wadi Daba, since these areas were already identified as EBA cemeteries by Professor A. Tsuneki (Tsuneki Pers. comm) in the 2007 field season of the Syro-Japanese mission to the Bishri mountainous area.

More than 50 tombs were identified in the Wadi Shabbout area. Almost all tombs were looted, but at least three burial types were defined, including shaft graves, stone chamber graves and cist graves. On the other hand, the area of outfall of Wadi Daba produced 30–40 intensively looted tombs, which contain chambers dug into a slope of the Wadi indicating a sort of shaft graves. No other types of burials were identified in the area.

Unfortunately, this brief survey revealed most tombs of both areas were seriously damaged by looting. The contrast of burial types in these two areas, however, possibly implies an internal differentiation represented by mortuary practices (i.e. class, gender or ethnicity, for instance) in the EBA community. Further detailed investigations consist of cleanings/excavations of the tombs, and documentation of the distribution of particular burial types in these areas are scheduled from the end of April to May 2008, in order to understand regional variability of burial patterns in the Middle

Euphrates Valley and the nature of burial practices in the EBA community in context.

4. GEOLOGICAL AND GEOGRAPHICAL FIELD SURVEY

Takeshi SAITO (Associate Professor, Meijo University)

Kazuhiro TSUKADA (Assistant Professor, Nagoya University)

In the fifth working season, our geological and environmental research team carried out a short field survey (24th–27th March, 2008) focusing on the basal sediments of Tell Ghanem al-'Ali. Two sites were selected for the survey: Site 1 is the western foot of the tell and Site 2 is the section in the factory under construction southeast of the tell (Fig. 4.1). We would like to report the outline of the stratigraphy of the basal sediments of the tell.

We re-dug down the 1 × 1 m pit into 2.1 m deep (Figs. 4.1, 4.2) at western foot of Tell Ghanem al-'Ali, which was turned over in the forth working season. The sediments of the pit are composed of muddy sand and include many artifacts such as earthenware and stone instruments. Detailed description of the pit wall is shown in Fig. 4.3.

Upper part of the pit walls are well stratified caused by bricks and sand layers. On the other hand, lower part is massive and includes many charcoal spots exhibiting indistinctive layers. Many of the sediments of the pit walls are likely to be anthropogenic especially in the upper part. We took seven samples for environmental study and ¹⁴C dating from the lower part of the profile.

Site 2

We found a good section showing the basal sediments of Tell Ghanem al-'Ali in the factory under construction southeast of the tell (Figs. 4.1, 4.4). The sediments consist mainly of ill-sorted muddy sand with charcoal fragments. Detailed description of the profile is shown in Fig. 4.5.

Upper part of the section contains several charcoal layers, suggesting intensive human activity in and around Tell Ghanem al-'Ali. On the other hand, fluvial gravel layer (Figs. 4.6, 4.7; “conglomerate” in Fig. 4.5) is intercalated in the lowermost part of the section. This gravel layer indicates the basement horizon of the tell.

We took 20 sediment samples from the section. Most of them include charcoal fragments available for ¹⁴C dating. We will do the dating for selected samples. The oldest age of the samples suggests the dawning period of the Tell Ghanem al-'Ali.

Relationship between Sites 1 and 2

Topographic map of Fig. 4.1 and our filed observation suggest that the altitude of the bottom of the pit at Site 1 would be ca. 229 m, and that the altitude of the fluvial gravel layer at the Site 2 is ca. 228 m. In addition, we were not able to find fluvial sediments at Site 1. These facts indicate that the section at Site 2 is stratigraphically lower than that at Site 1.

5. ARCHAEOLOGICAL SURVEY AROUND TELL GAHNEM AL-'ALI

Yoshihiro NISHIAKI (Professor, The University Museum, The University of Tokyo)

Seiji KADOWAKI (PD fellow, The University Museum, The University of Tokyo)

Shogo KUME (Doctoral student, Waseda University)

The fifth working season involved archaeological surveys (March 26 to April 3) in the areas around

Tell Ghanem al-'Ali. Building on the results of earlier surveys, we aimed at an intensive reconnaissance of archaeological sites and traces of land use in the targeted areas. For this purpose, we searched the survey areas on foot, navigated with topographic maps and high-resolution satellite images, which allowed us to make detailed records of the survey paths and discovered sites (Fig. 5.1). The intensive field-walking resulted in 1) the collection of artifacts of a wide chronological range—from the Palaeolithic to the Islamic period, 2) the discovery of occupational sites of the Palaeolithic and probably, the Early Bronze Age (EBA), and 3) a record of the distribution of mound tombs in broad areas at the northern fringes of the Bishri Plateau. These results could contribute to a better understanding of the settlement patterns and land use of the EBA inhabitants at Tell Ghanem al-'Ali and Tell Hammadin, as well as the local settlement history of the Middle Euphrates.

Objectives of the survey

Earlier investigations in our project reveal that the lowlands along the Euphrates River were the central loci of major EBA settlements, such as Tell Ghanem al-'Ali and Tell Hammadin. On the other hand, German excavations at Abu Hamad and the Syria-Japan joint surveys at Tell Shabbout and Jezra indicate that the EBA communities based at these tell sites appear to have used the uplands or the northern edges of the Bishri Plateau mainly as cemeteries. Using these earlier insights into the link between the Euphrates lowlands and uplands during the EBA, our survey was designed to obtain further archaeological evidence regarding prehistoric land use in this region; our target region was the areas around Tell Ghanem al-'Ali and Tell Hammadin. Through this survey, we also aimed to provide basic information about the population history of the target region by recording the locations of sites of a wide chronological range starting from the Palaeolithic period.

Survey areas

The survey areas covered the northern edges of the Bishri Plateau and the upper terraces of the Euphrates River, measuring 15 km E-W by 8 km N-S, along the southern bank of the river (Fig. 5.1). The western limit of our survey was a protruding terrace, used as a cemetery in the village of Jibli, while the eastern border was near Jezra. The satellite image showed a clear contrast between the Euphrates uplands and lowlands (Fig. 5.1). The latter are green and widely used for agricultural fields. On the other hand, the river-terraces (uplands) are populated by modern villages, and to their south lies the Bishri Plateau with very sparse vegetation. These terraces and the northern fringes of the plateau are incised by a series of north-south tributary valleys of the Euphrates River. While these wadis usually stretch over a few kilometers in length, Wadi Kharar, situated between Ghanem al-'Ali and Tell Hammadin, stands out for its length (ca. 20 km) and well-developed terraces. We surveyed the Euphrates terraces and the plateau primarily by walking along the wadis. However, the survey of the Euphrates terraces was difficult as these areas are heavily populated with modern villages, which left only a few open spaces for survey. Even these areas were found to be used as cemeteries or orchards, which considerably modified the ground surfaces. Thus, our survey focused more on the higher areas, i.e., the northern ends of the plateau.

Survey techniques

In order to achieve an intensive reconnaissance of archaeological sites, our survey was primarily conducted on foot, using high-resolution satellite images and a compass to navigate. This allowed us to record the survey paths and discovered sites (Fig. 5.1.). The surveyed wadis and areas were assigned numbers (no. 1 to 24). For survey paths and discovered sites within each area, an alphabet was attached to the number. Thus, survey paths and sites are identified by the combination of the area number and alphabet, such as 20A or 16K (Fig. 5.1, Table 5.1). A survey path fundamentally corresponds to a single topographic unit, such as a terrace of a wadi. However, a survey path was

divided when we encountered an archaeological site during the survey. The identification of archaeological sites was primarily based on the density of artifacts; the reason being, apart for tomb mounds and cairns, we rarely encountered features on the ground surface. We collected artifacts from the survey paths and archaeological sites. At the archaeological sites, we measured the extent of artifact distribution and general topography around the sites. When we encountered mound tombs, the extent of their distribution was sketched on hard-copies of high-resolution satellite images.

Sites and finds

Following eight days of pedestrian surveys, we had investigated 82 paths and discovered 32 sites, as listed in Table 5.1. Dating of the sites is still in the preliminary stage as the collections of artifacts are currently under analysis. Our survey discovered several locations that are densely distributed with archaeological sites. We present the results of the survey by describing the focal sites of study and their findings rather than grouping the sites by their chronological order.

Wadi Shabbout East (Areas 20A, 20B, and 20D)

This wadi is situated ca. 500 m east of Tell Shabbout, stretching 600–700 m in the N-S direction with its mouth at the cliff of the plateau. Despite its small size, the wadi has a fairly flat terrace on the right bank. Along this terrace (Fig. 5.2), we discovered three spots that were distributed with chipped stones and only a few pottery sherds (Areas 20A, 20B, 20D). From the three spots, Area 20A is the most extensive (100 m × 15 m), with the densest scatter of artifacts. Area 20A is located at a bend of the wadi, which may have provided a cozy, enclosed basin for a camp.

At Area 20A, we collected more than 100 chipped stone artifacts, most of which were cortical flakes. Retouched tools were limited to a few pieces with marginal retouch. Preliminary observations of these pieces and cores indicate that water-rolled cobbles were used as raw material for the production of flakes (Fig. 5.3). According to the geological investigation of this project, such flint cobbles are available from the gravel layers in the Euphrates river-terraces. In fact, we often came across fist-sized flint cobbles during the survey on the terraces of the Euphrates. Technologically, many flakes retain cortex on their platforms, suggesting that core reduction rarely involved the preparation of striking platforms. Similar technological characteristics and the use of raw materials are observable in the collections from Areas 20B and 20D. More importantly, these technological features also apply to the chipped stones from Tell Ghanem al-'Ali and Tell Hammadin, as found by the preliminary comparisons of the assemblages, suggesting EBA dates of the survey collections.

Jezra (Areas 23H and 23J)

Jezra, located ca. 3 km southeast of Tell Ghanem al-'Ali, has been reported as an extensive cemetery area with a large number of mound tombs, which probably date to the EBA. This area also has a large stone-walled building (ca. 150 × 100 m) earlier reported as an Islamic fortification. We surveyed a small wadi, located to the immediate west of this large stone structure. This wadi at Jezra is steeply incised near its lower end, forming a V-shaped cross section. However, a little upstream is associated with terraces, providing inhabitable areas. On one such terrace is a small tell-like mound (Area 23H), where abundant chipped- and ground-stone artifacts and pottery sherds were collected (Fig. 5.4).

Although at this point it is difficult to determine how much of this mound contains anthropogenic deposits, a large amount of pottery sherds, food processing tools (i.e., grinding slabs and pestles), and chipped stones indicate that occupations at the site were clearly more permanent than in transitory camps (Fig. 5.5). A dozen robber pits had been opened at the site, suggesting that this site yields a great deal of cultural objects that attract the attention of robbers. The collected chipped stones include a segment of what is probably a Canaanite blade, as well as flakes and cores with water-rolled cortex (Fig. 5.6). The flaking technology of the latter group is similar to that of the collections from

Area 20A and Tell Ghanem al-'Ali. These collectively suggest the date of the site as EBA, which appears consistent with the general characteristics of the pottery sherds (Fig. 5.7).

We also visited the large building structure (Area 23J), situated on the hilltop immediately to the east of Area 23H. The building partially exposes the external surfaces of the walls, while the inside is filled with sediments up to or above the height of the other walls (Fig. 5.8). Unexpectedly, we found that the surface of the deposits inside the building was associated with mound tombs and densely strewn with chipped stones, once again including what is probably a Canaanite blade (Fig. 5.9). The pottery sherds collected from this location are currently being analyzed to determine their date (Fig. 5.10).

Wadi Kharar (Areas 16C, 16D, 16E, 16F, 16I, 16J, 16K, 16M, 16N, 16O, 16P, 16Q, 16R, 16V, 16W, 16AI, 16AK, 16AM, 16AO)

Wadi Kharar is situated between Tell Ghanem al-'Ali and Tell Hammadin, and is the largest tributary valley of the Euphrates in the survey area, stretching ca. 20 km in the N-S direction (Fig. 5.1). Our survey covered the lower 7 km of this wadi, resulting in the discovery of a series of Palaeolithic sites on the wadi terraces. Most sites are located on the terraces at or near the confluence of Wadi Kharar and its tributary wadis. Of these locations, particularly noteworthy is an area with broad terraces (ca. 80 m × 50 m and ca. 200 m × 60 m) associated with a spring (Fig. 5.12), which is ca. 4 km upstream from where Wadi Kharar drains into the Euphrates lowlands. On the terraces in the spring, we recorded dense distributions of chipped stone artifacts at four areas (Areas 16M, 16N, 16O/P, 16Q) and collected about 400 pieces, including more than ten end scrapers, several burins, ca. 40 blades/bladelets, and some bladelet cores, some of which are characterized by carinated forms (Fig. 5.13).

These techno-morphological characteristics indicate the Early Epipalaeolithic or Late Upper Palaeolithic period. Epipalaeolithic occupations were also discovered on the terraces ca. 1 km downstream of the spring. This location, at the confluence of Wadi Kharar and a tributary wadi, consists of two terraces of different elevations. Area 16I sits on a lower terrace, where we collected ca. 50 pieces of chipped stones, including two lunates, one end scraper, and several blade/lets, which indicate the Natufian period (Fig. 5.14). On the other hand, the upper terraces (16J and 16K) yielded no lunates. Instead, several rectangular microliths were collected along with blade/lets and a unipolar bladelet core, suggesting their chronological precedence in the Epipalaeolithic. Concentrations of Epipalaeolithic artifacts were also recorded further downstream at Areas 16C, 16D, and 16R.

The survey in Wadi Kharar also encountered concentrations of lithics that can be techno-morphologically dated to the Middle Palaeolithic (Fig. 5.15: 16F, 16AI, 16AM, and 16AO). These artifacts are on the upper terraces of Wadi Kharar, which are located 4–6 m above the lower terraces, where Epipalaeolithic artifacts were often recovered.

Isolated finds

Although no archaeological sites were found in many survey paths, we came across a rain of artifacts during the field-walking and collected them by survey paths. These collections sometimes include tool types of chronological markers and hence, are also worth an analysis. They can provide subsidiary evidence for land use in prehistory. For example, lunates were collected in isolation in Areas 16AE and 10M, suggesting the use of these areas during the Natufian period. Isolated finds were also recorded in the collections from other sites, as indicated by distinct tool types, production technology, raw material types, and different degrees of patination. Closer examinations are necessary to accurately assess the chronological representations of the collected artifacts.

Mound tombs and cairns

The intensive field-walking also enabled us to record the distributions of mound tombs (probably EBA) in previously unknown areas. Investigations of the mound tombs have been carried out mainly in the areas near Tell Ghanem al-'Ali, such as Tell Shabbout and Jezra. However, the present survey encountered the comparable density of tomb distribution in the plateau areas that overlook Tell Hammadin (Fig. 5.16). These areas are located along several wadis, including Wadi 'Ain and Wadi Qutena, which flow towards the direction of Tell Hammadin. The tombs at these locations show a similar range of structural types as those near Tell Shabbout. Pottery sherds were strewn on the ground surface indicating that many of the tombs were looted. The collected sherds are under analysis for comparison with those from the graves near Tell Shabbout.

In one of the cemetery areas above Tell Hammadin, we came across a cairn at about 1 km south of the northern edge of the plateau (Area 9D; Fig. 5.17). It measures ca. 6 m in length, ca. 3.5 m in maximum width, and ca. 1 m in height, forming a key-hole shape in plan. It is surrounded by stone alignments, which could be structures associated with the cairn. Very few artifacts were collected, preventing us from determining its date. However, given that cairns are usually distributed further south near the Bishri Mountains, the discovery of a cairn near the northern edges of the plateau (and among mound tombs) could raise an interesting question about its social context, particularly if the cairn is contemporary to the mound tombs.

Summary and discussions

Intensive pedestrian surveys allowed us to discover new sites of a wide chronological range and record their distributions. This also suggests that perhaps many more sites still remain to be discovered in this region. Analyses of collected artifacts are currently in progress, and thus, the dating of sites is still tentative. However, the results of our surveys indicate the possibility of diachronic changes in land use patterns. For example, we encountered Palaeolithic occupations more frequently on the terraces of Wadi Kharar than in smaller N-S wadis to the east and west of Wadi Kharar. In the latter areas, we encountered temporary camp sites (Areas 20A, 20B, and 20D) rather than permanent occupations (Area 23H), and dense distributions of mound tombs, likely to date to the EBA. On the other hand, there are few traces of Bronze Age activities in and in the vicinity of Wadi Kharar.

Advantages in the use of Wadi Kharar are evident in the availability of water and the travel routes. On the other hand, the apparent decline in the use of Wadi Kharar during the EBA may merit some discussion. This may be explained by geomorphological reasons. The relatively active Wadi Kharar may have either eroded away the traces of Bronze Age activities on lower terraces or covered them with sediment. However, this may not explain the sparse distribution of tombs in this area. The second possibility is the absence of N-S wadis in the areas to the immediate east and west of Wadi Kharar. This is because Wadi Kharar has its tributaries running in the E-W direction. Since the E-W wadis are obstacles to the N-S travels, these areas may not have attracted Bronze Age inhabitants.

Another possible reason is that the EBA land use patterns were spatially linked to the tell sites in the lowland, i.e., Tell Ghanem al-'Ali and Tell Hammadin. The dense distribution of mound tombs appear to make two clusters, each spatially associated with the locations of the tells. In particular, the mound tombs tend to be located along the wadis that overlook the tells. This applies not only to Tell Shabbout areas but also to Jezra and the grave areas above Tell Hammadin. If we date more securely the occupational sites in small wadis, such as at Areas 20A and 23H, in order to examine their contemporaneity with Tell Ghanem al-'Ali, we can address questions regarding the settlement patterns and land use during the EBA, as well as the relationship between the communities at Tell Ghanem al-'Ali and Tell Hammadin. An investigation of these issues requires further analysis of collected artifacts and surveyed sites.

Table 5.1 List of paths and sites surveyed in the 2008 spring season.

Area	Bag	Bag type	Site/Wadi/Village Name	Notes	Pottery sherds	Chipped stones
1	A	Path	Village (Tell) Sharida		0	1
3	A	Path	Village Jibli		0	0
4	A	Path	Village Jibli		0	0
5	A	Path	Village Jibli		0	0
6	A	Path	Village Jibli		0	2
7	A	Path	Village Jibli		0	0
8	A	Path	Village Jibli		0	1
9	A	Path	Village Jibli		0	1
9	B	Site	Village Jibli	Small scatter of chipped stones on the Euphrates terrace	0	17
9	C	Path	Unnamed wadi		0	0
9	D	Site	Unnamed wadi	Burial cairn associated with structures	2	4
9	E	Path	Unnamed wadi		3	24
9	F	Path	Unnamed wadi		22	0
9	G	Path	Wadi Qutena		0	9
9	H	Path	Wadi Qutena		0	0
9	I	Path	Wadi Qutena		0	1
10	A	Path	Wadi 'Ain East		0	1
10	B	Path	Wadi 'Ain East		0	0
10	C	Site	Wadi 'Ain East	Mound tombs, probably Bronze Age	6	2
10	D	Site	Wadi 'Ain East	Mound tombs, probably Bronze Age	0	0
10	E	Path	Wadi 'Ain East		0	11
10	F	Path	Wadi 'Ain East		0	11
10	G	Path	Wadi 'Ain East	Including a corner-thinned blade (obsidian)	2	13
10	H	Path	Wadi 'Ain East		1	4
10	I	Path	Wadi 'Ain East		0	0
10	J	Path	Wadi 'Ain East		0	8
10	K	Path	Wadi 'Ain East		0	3
10	L	Path	Wadi 'Ain East		0	24
10	M	Path	Wadi 'Ain East	Including a lunate	0	1
10	N	Path	Wadi 'Ain East		1	1
11	A	Path	Unnamed wadi (Several Wadis situated in north of village Zor Shanmar Foqani)		0	9
11	B	Path	Unnamed wadi (North of village Zor Shanmar Foqani)		0	0
11	C	Path	Unnamed wadi (North of village Zor Shanmar Foqani/ Tributary of the Wadi Kharar)		2	208
11	D	Path	Unnamed wadi (North of village Zor Shanmar Foqani/ Tributary of the Wadi Kharar)		0	21

12	A	Path	Village Zor Shanmar Foqani	Modern graves	0	0
13	A	Path	Village Zor Shanmar Foqani		0	0
14	A	Path	Wadi Kharar		0	7
14	B	Path	Wadi Kharar		0	11
14	C	Site	Wadi Kharar	Scatter of chipped stones (15 × 3 m) on upper terrace	0	24
14	D	Path	Wadi Kharar		0	13
16	A	Path	Unnamed wadi (Tributary of the Wadi Kharar)		0	5
16	B	Path	Wadi Kharar	Including a blade and a burin (prob. PPNB)	0	4
16	C	Site	Wadi Kharar	Scatter of chipped stones (30 m × 3 m) on lower terrace (6 m above river level); Epipalaeolithic	0	48
16	D	Site	Wadi Kharar	Small scatter of chipped stones on lower terrace (6 m above river level); Epipalaeolithic. Probably part of Area 16C	0	5
16	E	Site	Wadi Kharar	Small scatter of chipped stones on lower terrace (4 m above river level); Epipalaeolithic	0	13
16	F	Site	Wadi Kharar	Scatter of chipped stones (10 m) on upper terrace (12 m above river level); Middle Palaeolithic	0	184
16	G	Path	Wadi Kharar		0	15
16	H	Path	Wadi Kharar		0	10
16	I	Site	Wadi Kharar	Scatter of chipped stones (45 m × 15 m) on lower terrace (6 m above river level); Late Epipalaeolithic (Natufian)	0	49
16	J	Site	Wadi Kharar	Scatter of chipped stones (26 m) on middle terrace (9 m above river level); Early Epipalaeolithic	0	26
16	K	Site	Wadi Kharar	Scatter of chipped stones (30 m × 8 m) on middle terrace (9 m above river level); Early Epipalaeolithic	0	53
16	L	Path	Wadi Kharar		0	63
16	M	Site	Wadi Kharar (near spring)	Scatter of chipped stones (200 m × 55 m) on lower terrace (4.5 m above river level); Early Epipalaeolithic	0	106
16	N	Site	Wadi Kharar (near spring)	Scatter of chipped stones (70 m × 50 m) on lower terrace (4.5 m above river level); Early Epipalaeolithic	0	79
16	O	Site	Wadi Kharar (near spring)	Scatter of chipped stones on upper terrace (14.5 m above river level); Early Epipalaeolithic. Same locus as Area 16P	0	50
16	P	Site	Wadi Kharar (near spring)	Scatter of chipped stones on upper terrace (14.5 m above river level); Early Epipalaeolithic. Same locus as Area 16O	0	77

16	Q	Site	Wadi Kharar (near spring)	Scatter of chipped stones on upper terrace (14.5 m above river level); Early Epipalaeolithic	0	83
16	R	Site	Wadi Kharar	Scatter of chipped stones on lower terrace (3.5 m above river level); Epipalaeolithic	0	69
16	S	Site	Wadi Kharar (near spring)	Scatter of chipped stones on lower terrace; Epipalaeolithic. Continuation of Area 16N	0	9
16	T	Path	Wadi Kharar		1	9
16	U	Path	Wadi Kharar		0	7
16	V	Site	Wadi Kharar	Scatter of chipped stones (15 × 3 m) on upper terrace; Palaeolithic	0	23
16	W	Site	Wadi Kharar	Scatter of chipped stones (10 × 8 m) on upper terrace; Palaeolithic	0	7
16	X	Path	Wadi Kharar		0	4
16	Y	Path	Wadi Kharar		0	27
16	Z	Path	Wadi Kharar		0	66
16	AA	Path	Wadi Kharar		0	30
16	AB	Path	Wadi Kharar	Blade with bidirectional flaking scars	0	15
16	AC	Path	Wadi Kharar		0	1
16	AD	Path	Unnamed wadi (Tributary of the Wadi Kharar)		0	0
16	AE	Path	Unnamed wadi (Tributary of the Wadi Kharar)	Including a lunate	0	2
16	AF	Path	Unnamed wadi (Tributary of the Wadi Kharar)	Retouched Levallois point	0	1
16	AG	Path	Wadi Kharar		0	4
16	AH	Path	Wadi Kharar		0	0
16	AI	Site	Wadi Kharar	Scatter of chipped stones (15 × 10 m) on upper terrace (11.5 m above river level); Middle Palaeolithic	0	45
16	AJ	Path	Wadi Kharar		0	5
16	AK	Site	Wadi Kharar	Scatter of chipped stones (8 × 6 m) on middle terrace (6 m above river terrace); Palaeolithic	0	
16	AL	Path	Wadi Kharar		0	14
16	AM	Site	Wadi Kharar	Scatter of chipped stones (20 m) at the foot of terrace slope; Middle Palaeolithic. Possibly redeposition	0	17
16	AN	Path	Wadi Kharar		0	7
16	AO	Site	Wadi Kharar	Scatter of chipped stones (20 × 5 m) on upper terrace (13 m above river level); Middle Palaeolithic	0	41
16	AP	Path	Wadi Kharar		0	4
16	AQ	Path	Wadi Kharar		0	0
17	A	Path	Wadi Qais		0	6

17	B	Path	-		0	2
17	C	Path	Unnamed wadi		0	3
20	A	Site	Wadi Shabbout East	Scatter of chipped stones (100 m × 15 m) on low terrace (2 m above river level); probably Bronze Age	1	111
20	B	Site	Wadi Shabbout East	Sparse scatter of chipped stones on the same terrace as Area 20A; probably Bronze Age	1	8
20	C	Path	Wadi Shabbout East		2	8
20	D	Site	Wadi Shabbout East	Small scatter of chipped stones; probably Bronze Age	1	43
20	E	Path	Unnamed wadi		2	65
20	F	Path	Unnamed wadi		0	12
20	G	Path	Unnamed wadi		0	3
20	H	Path	Unnamed wadi		0	6
21	A	Path	Wadi Shabbout West		0	18
21	B	Path	Wadi Shabbout East		0	12
21	C	Path	Wadi Daba		1	2
22	A	Path	-		0	0
22	B	Path	Unnamed wadi		0	0
22	C	Path	Unnamed wadi		0	17
22	D	Path	Unnamed wadi		3	0
23	A	Path	Wadi Ghara		0	0
23	B	Path	Wadi Ghara		0	0
23	C	Path	Wadi Ghara		0	4
23	D	Path	Wadi Jezra West	Scraper on a flake of dark brown flint with bipolar flaking scars. Neolithic?	4	11
23	E	Path	Wadi Jezra West		0	9
23	F	Path	Wadi Jezra West		12	6
23	G	Site	Wadi Jezra West	Small cluster of sherds, probably refittable. Small scatter of chipped stones on upper terrace	1	7
23	H	Site	Wadi Jezra West	Small mound (4–5 m in height) on low terrace; probably Bronze Age. Food-processing tools (pestles and grinding slabs)	15	24
23	I	Site	Wadi Jezra West	Mound tombs; probably Bronze Age	7	9
23	J	Site	Jezra/ Wadi Jezra West	Large stone-walled building (150 × 100 m); Islamic and/or Bronze Age	34	35
24	A	Path	Wadi Jezra East		8	27
24	B	Path	Wadi Jezra East		0	0
24	C	Path	Wadi Jezra East		3	0

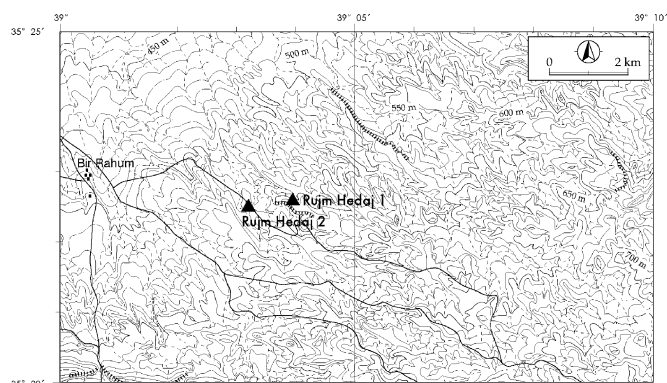


Fig. 1.1 The Bir Rahum Area and the Location of Rujm Hedaja 1 and 2.



Fig. 1.2 BC-10: a distant view (from W).



Fig. 1.3 BC-10: a general view (from SE).



Fig. 1.4 BC-10: a general view of the cist (from NW).



Fig. 1.5 BC-10: Human skeletal remains from the central chamber.



Fig. 1.6 BC-10: a general view of Grave A (from S).

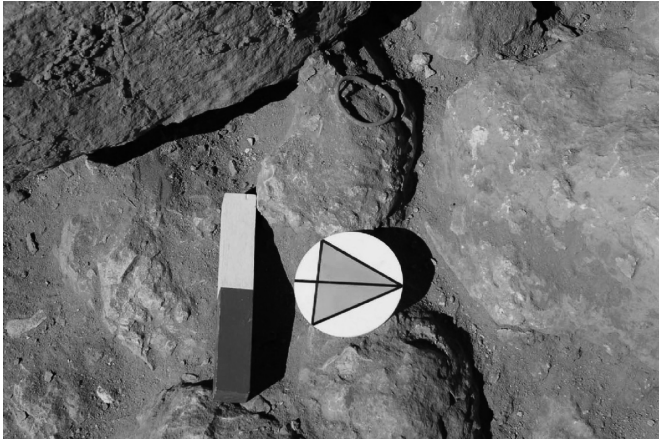


Fig. 1.7 BC-10: a bronze bracelet from Grave B (from E).



Fig. 1.8 BC-10: a close-up view of the Inner and Outer Enclosures.

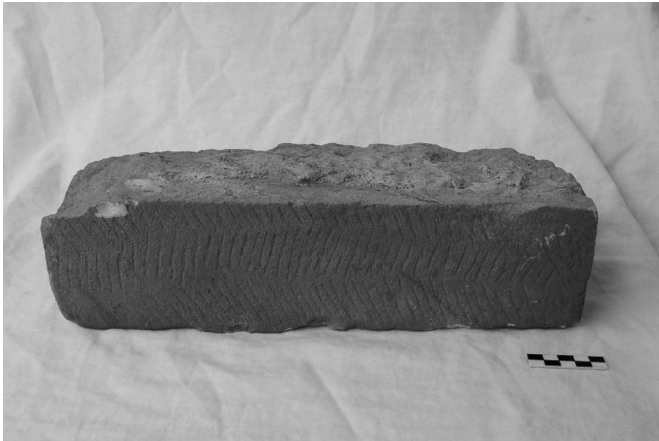


Fig. 1.9 BC-10: Construction material decorated with herringbone patterns.



Fig. 1.10 BC-10: Construction material engraved with an animal design.

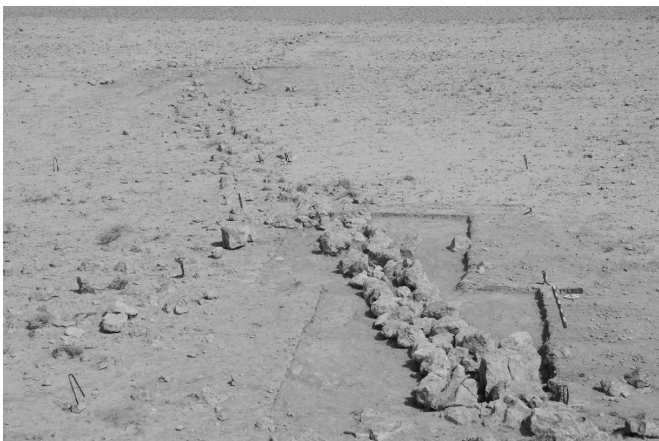


Fig. 1.11 Feature 01: a general view (from S).

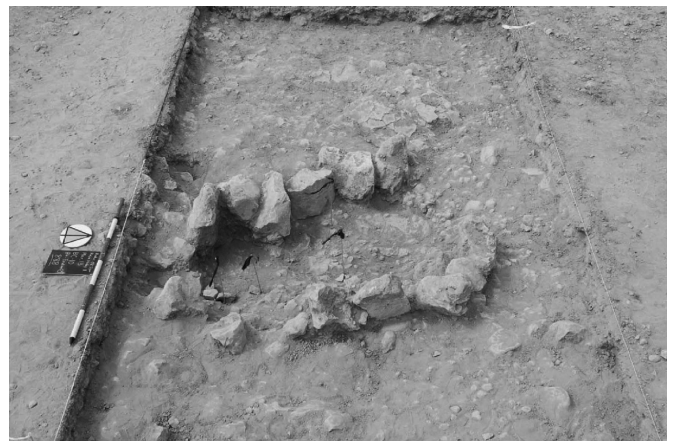


Fig. 1.12 Feature 05: a general view (from E).



Fig. 1.13 BC-10: Pottery sherds (Group A and B).



Fig. 1.14 BC-10: Adornments made of marble (left) and snail (right two).

Elements Distribution

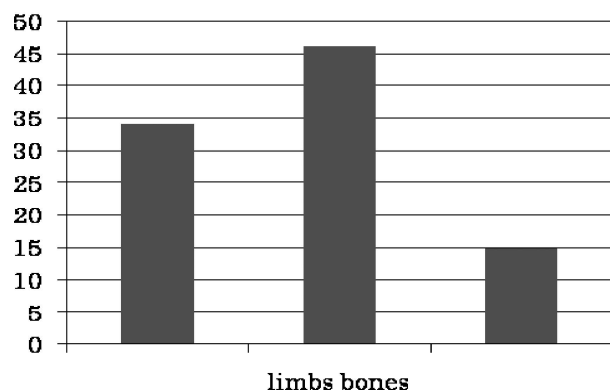


Fig. 2.1 Distribution of bone elements from Tell Ghanem al-'Ali.

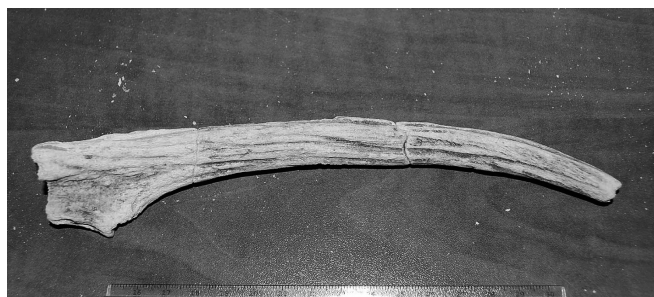


Fig. 2.2 Complete deer antler.



Fig. 2.3 Complete Tibia of a domestic ass.



Fig. 2.4 Male Gazelle horn, the shape of which is close to Subguttrosa species.



Fig. 3.1 Looted tombs in the Wadi Shabbout area, looking east.



Fig. 3.2 Looted tombs in the Wadi Daba area, looking northwest

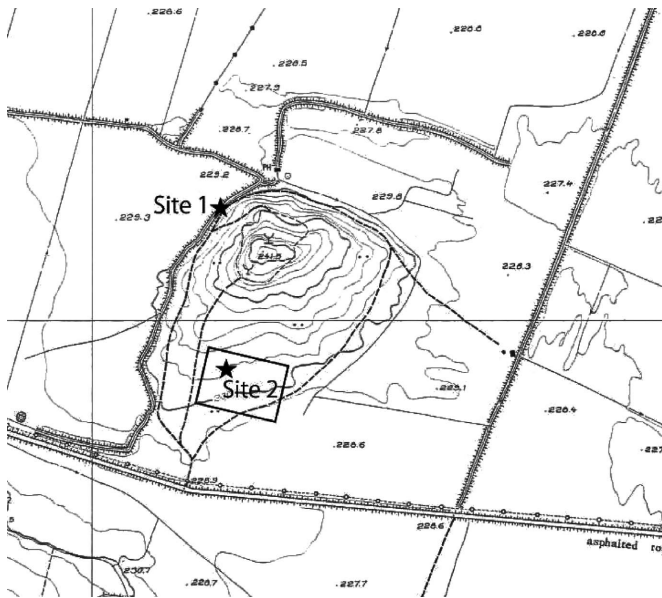


Fig. 4.1 Map showing the two sites studied. Rectangle indicates walls of the factory under construction.

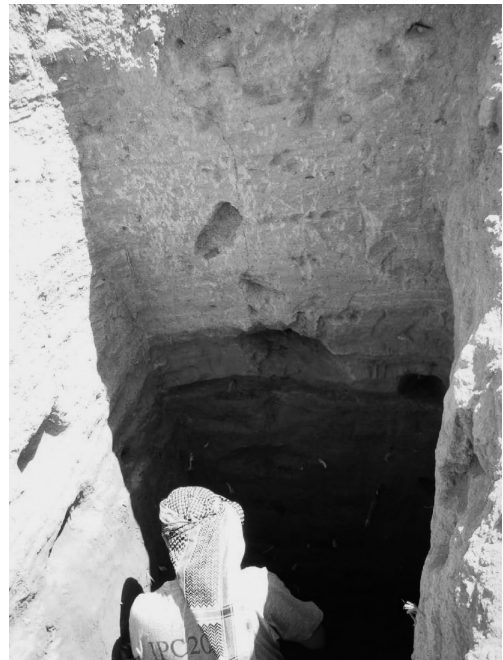


Fig. 4.2 Pit at the Site 1.



Fig. 4.4 Studied section in the factory under construction (Site 2).

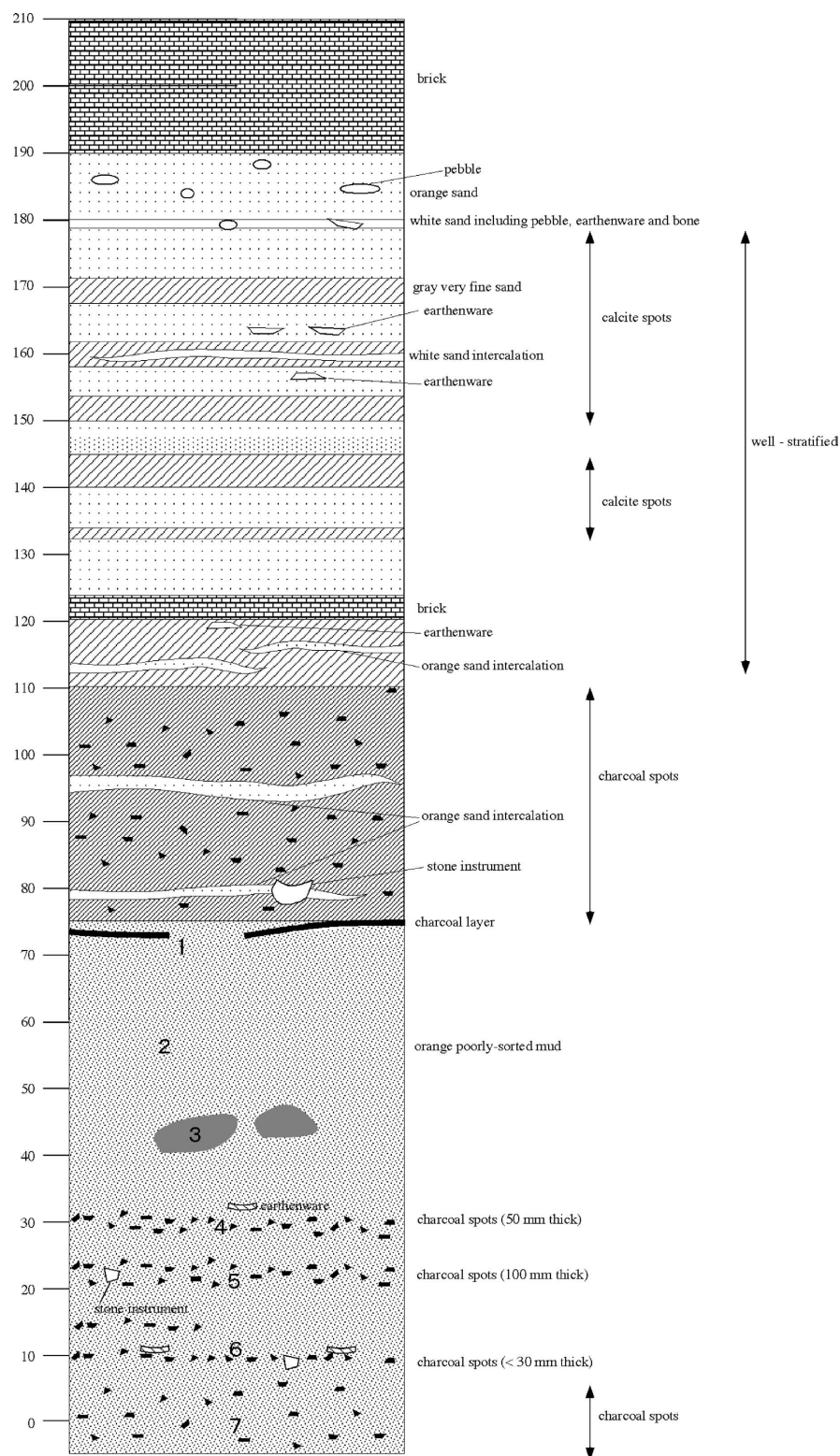


Fig. 4.3 Detailed columnar section of the Site 1 pit (scale in centimeter). Bold number indicates sediment samples.

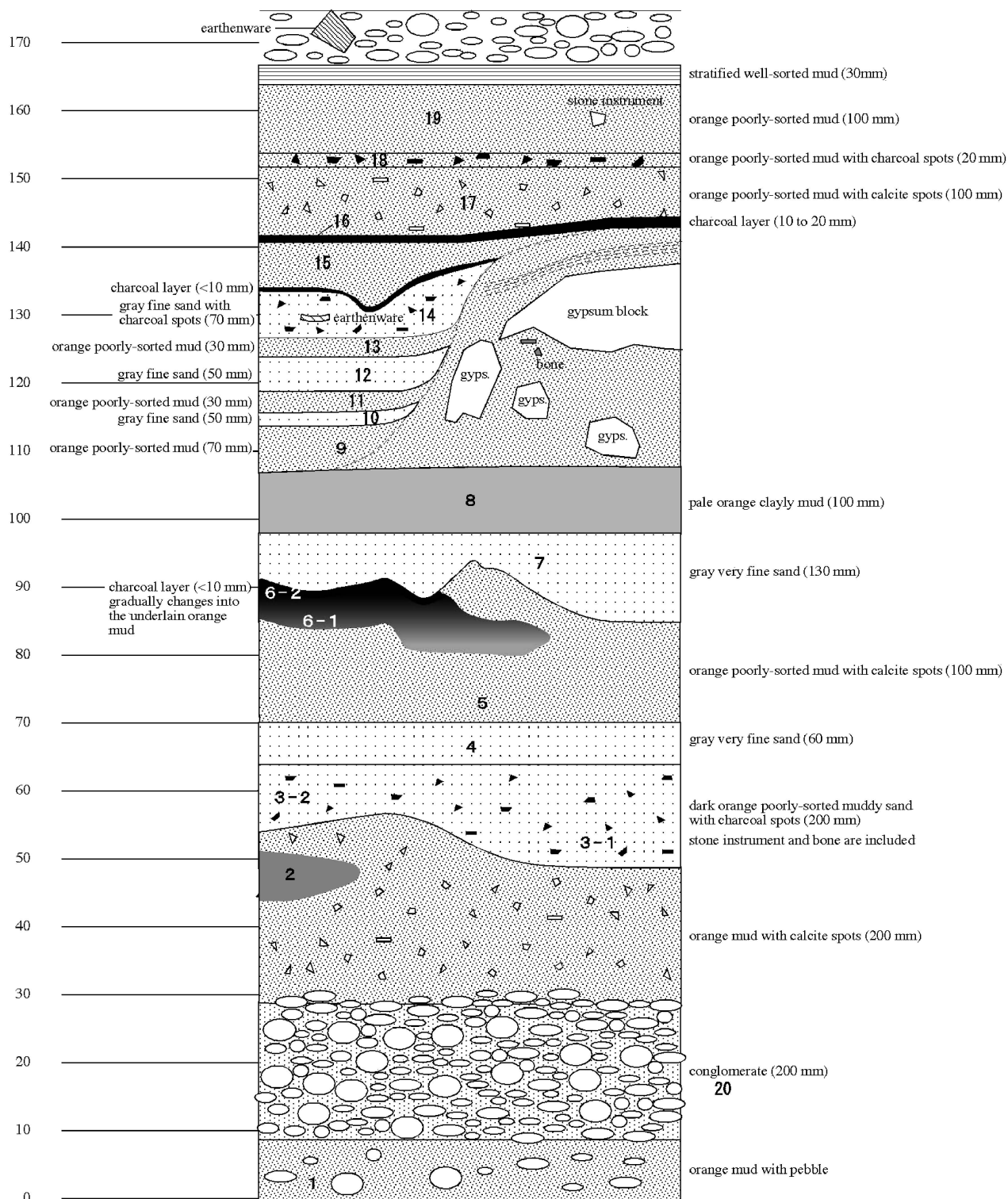


Fig. 4.5 Detailed columnar section of the Site 2 (scale in centimeter). Bold number indicate sediment samples.

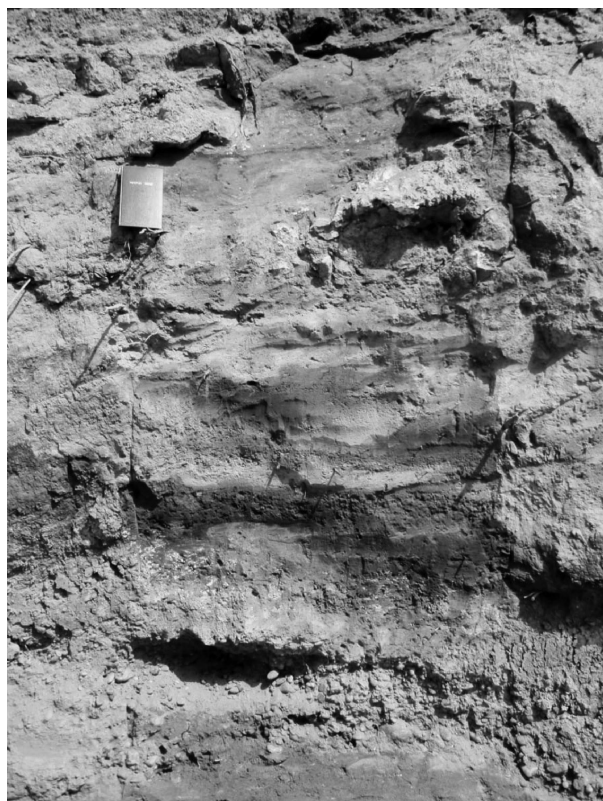


Fig. 4.6 Profile of the section studied at Site 2. Notebook is 16.5 cm long.



Fig. 4.7 Fluvial gravel layer at the lowermost part of the section.

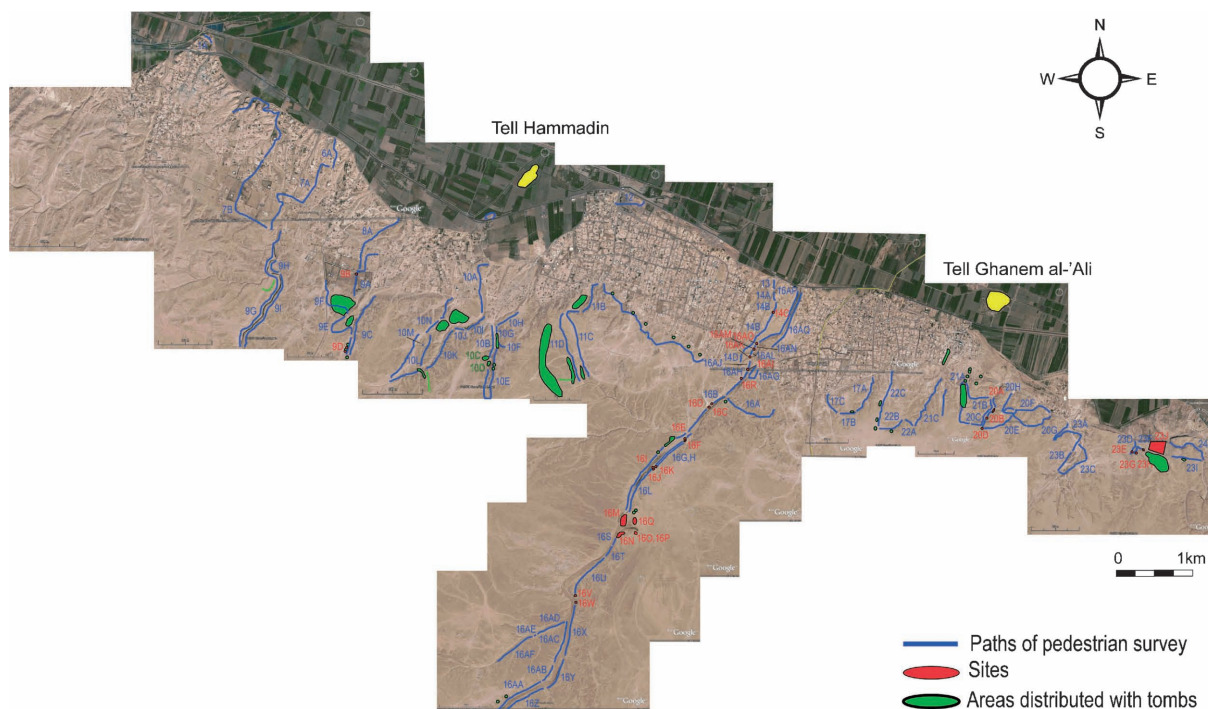


Fig. 5.1 Satellite image of the surveyed areas, showing paths, sites, and distributions of mound tombs that were recorded in pedestrian surveys.



Fig. 5.2 Wadi Shabout East (Area 20A), looking south. More than 100 chipped stone artifacts with a few pottery sherds were collected on the right bank of the wadi.

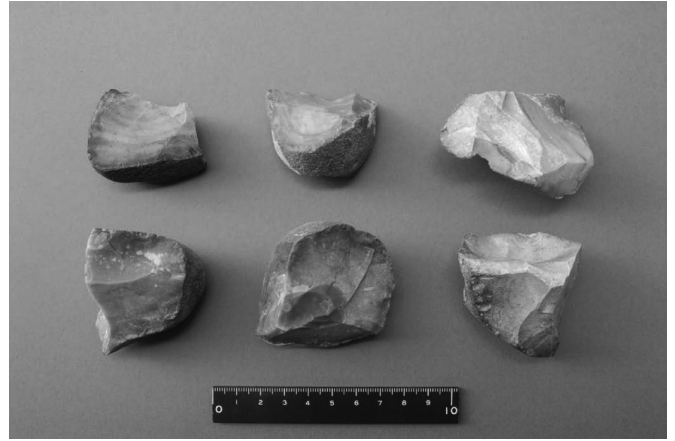


Fig. 5.3 Cores from Area 20A (Wadi Shabout East). Note that rolled cobbles are reduced with minimal preparation of cores for the production of flakes.



Fig. 5.4 Small mound (Area 23H) located on the left bank of Wadi Jezra West, looking southwest. Robber pits failed to find tombs on the mound.

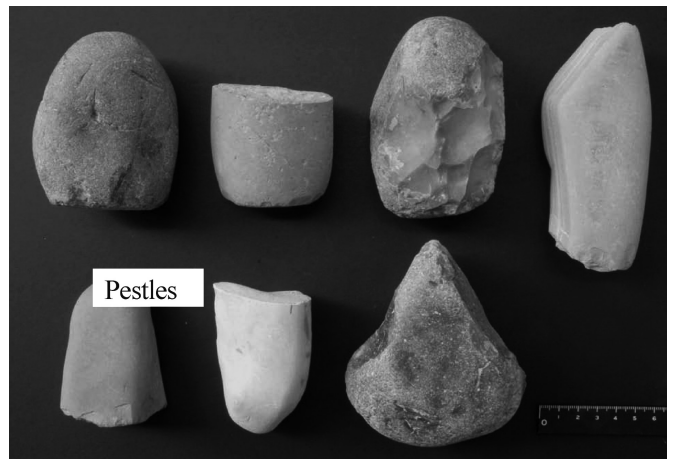


Fig. 5.5 Ground stones from the small mound (Area 23H) in Wadi Jezra West. Pestles in this photo and basalt grinding slabs indicate food processing activities at the site.



Fig. 5.6 Chipped stones from the small mound (Area 23H) in Wadi Jezra West. Top left is probably a Canaanite blade (burnt).



Fig. 5.7 Pottery from Area 23H (Wadi Jezra West).



Fig. 5.8 Large, stone-walled building (150 m × 100 m) located on the hill top of Jezra (Area 23J).

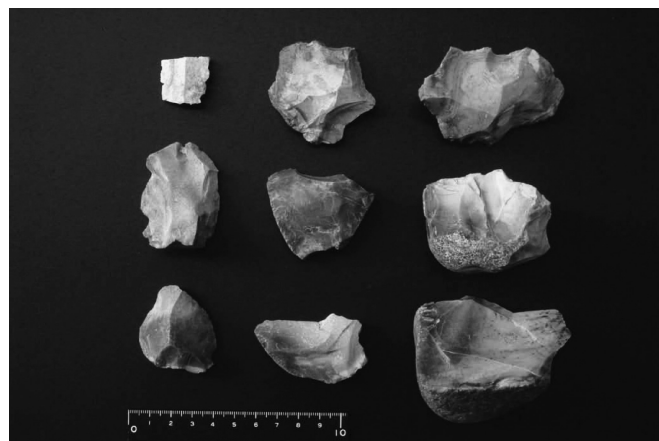


Fig. 5.9 Chipped stones collected on the ground surface inside the large building (Area 23J) at Jezra. Top left is probably a Canaanite blade (burnt).

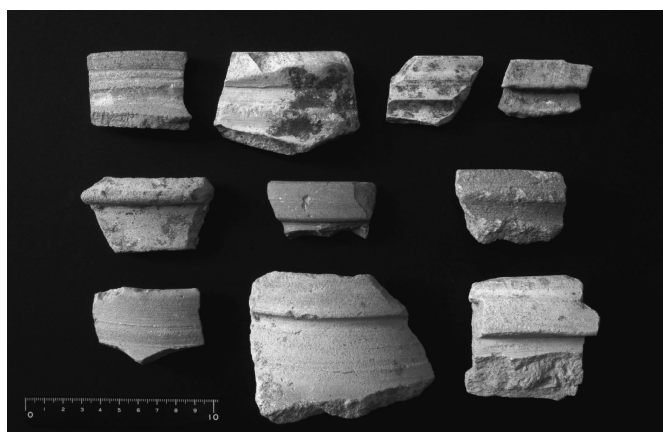


Fig. 5.10 Pottery sherds collected on the ground surface inside the large building (Area 23J) at Jezra.



Fig. 5.11 General view of Wadi Kharar, looking south.



Fig. 5.12 Spring at a tributary of Wadi Kharar, looking west. Areas 16O and 16 P are located on the left bank. Top right is the southern end of Area 16M on the lower terrace of Wadi Kharar.

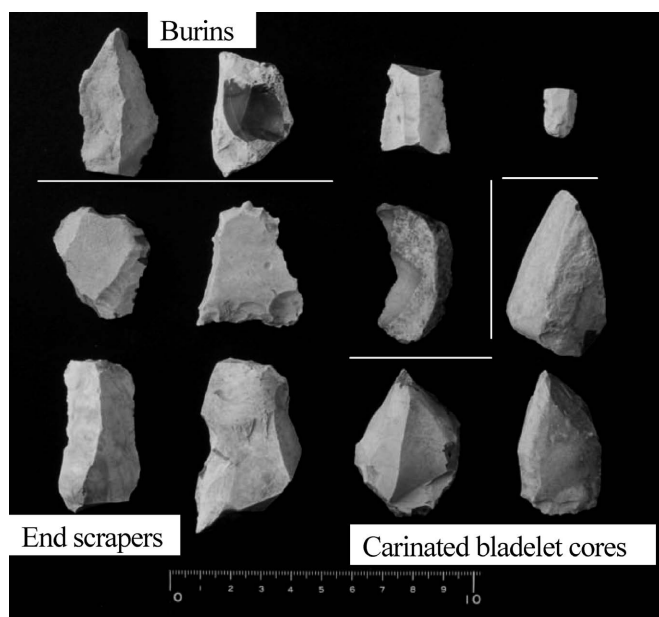


Fig. 5.13 Chipped stones from Area 16N on a lower terrace near the spring in Wadi Kharar.

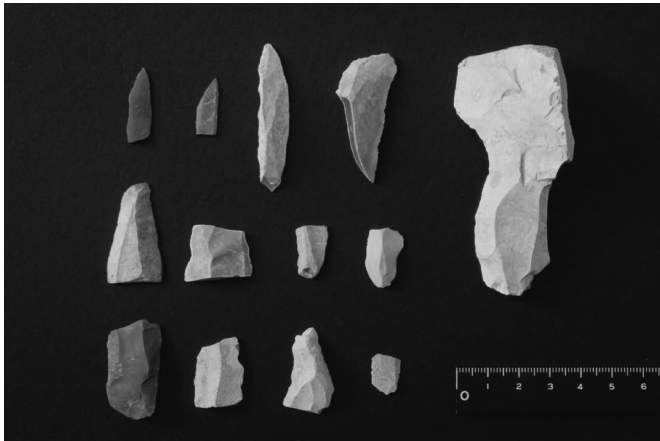


Fig. 5.14 Chipped stones from Area 16I on a lower terrace of Wadi Kharar. Two lunates are seen on the top left corner.



Fig. 5.15 Middle Palaeolithic chipped stones from Area 16AO on upper terrace of Wadi Kharar.



Fig. 5.16 Mound tombs located near Area 10N on the plateau along Wadi 'Ain West, looking east.



Fig. 5.17 A burial cairn located at Area 9D near the upstream of Wadi Qutena, looking southeast.

تقرير موسم العمل الخامس للبحث الأثري للبعثة الأثرية السورية اليابانية العاملة في منطقة جبل البشري

بدأ موسم العمل الخامس من البحث الأثري للبعثة الأثرية السورية اليابانية المشتركة في جبل البشري بتاريخ الثالث من آذار لعام 2007 وانتهى في الخامس من نيسان لعام 2007 وفي البداية نود أن نشكر الدكتور بسام جاموس المدير العام للآثار والمتاحف في سورية والدكتور ميشيل مقدسي مدير التنقيب والبحث الأثري في المديرية العامة للآثار والمتاحف والمشرف المستشار لهذا البحث لما قدموه من دعم لإنجاح هذا الموسم من العمل. وقد تألفت كوادر هذه البعثة من الجانبين السوري والياباني من الأعضاء التالية أسمائهم : الجانب السوري : انس الخابور (مديرا) , احمد سلطان , أيهم آل فخري , محمد جاجان . الجانب الياباني : كاتسوهيكو اونوما (مديرا) , تاكارو اداتشي , كاي سوزوكي , لبنى عمر , تاكاش سايتو , كازوهيرو تسوكادا , هيروتوشي نوموتو , يوشوهيرو نيشياكي , شوغو كومي , سايجي كادراكي .

فقد تعددت الأبحاث في هذا الموسم الخامس من العمل حيث تم التركيز على :

أولاً : استكمال السبر الاختباري لموقع رجوم حداجة : فقد تم التركيز على إجراء السبر لرجم كبير وضخم يقع على الطرف الشمالي من جبل البشري . وذلك بهدف التعرف على الخلفية الرعوية لمجتمعات عصر البرونز القديم في منطقة حوض الفرات الأوسط , حيث أن أعمال السبر في المنطقة BC10 من رجم حداجة 1 قد ألقت الضوء على نماذج الدفن في الجهة الشمالية من جبل البشري في فترة عصر البرونز المبكر. حيث لدينا أفكار واضحة بأن هذه المنطقة قد شكلت حلقة رعوية واسعة لمجتمعات عصر البرونز المبكر في منطقة حوض الفرات الأوسط , هذا الاكتشاف ربما يفتح الطريق لتكوين صورة بأنها لمجتمعات رعوية مبكرة (امورية) والتي أشارت النصوص السومرية والأكادية لوجودها في جبل البشري. ومع ذلك فإن أعمال السبر لهذا الموسم كانت واسعة جداً وذلك من أجل التأكد من هذه الفكرة . حيث ستكون أعمال المسح في الموسم المقبل واسعة ومكثفة في هذه المنطقة

ثانياً : دراسة البقايا الحيوانية في تل غانم العلي , وذلك من خلال تحليل العينات الحيوانية التي استخرجت من تل غانم العلي . وقد بينت الدراسة التمهيدية لهذه العينات أن هذه المنطقة كانت تعتمد على رعي الأغنام والماعز والماشية , وقد كان الصيد يشكل جزء من نظام الغذاء يعتمد على حيوانات البادية في البشري .

ثالثاً : مسح مقابر البرونز المبكر في المنطقة المجاورة لتل غانم العلي حيث تم مسح واستقصاء المقابر المتوضعة على الحافة الشمالية لجبل البشري , وذلك بهدف إلقاء الضوء على مظاهر الدفن لمستوطنات عصر البرونز المبكر في تل غانم العلي . فقد ظهر تباين في أسلوب الدفن في منطقتين متجاورتين , منطقة وادي شبوط ومنطقة وادي الضبع , والذي من المتوقع أنهما تتضمنان اختلاف باطني متمثل في أسلوب ممارسة الدفن من حيث الجنس ووضعيه الدفن

لمجتمعات عصر البرونز المبكر , حيث أن أعمال هذا الموسم اعتمدت على دراسة مفصلة لهذه المنطقة تتألف من مسح هذه المقابر وتوثيقها من اجل فهم إقليمي للتغيرات والتبدلات في أساليب الدفن في وادي الفرات الأوسط , وطبيعة ممارسة الدفن لمجتمعات عصر البرونز المبكر .

رابعاً : القيام بأعمال المسح الجيولوجي للمناطق المحيطة بتل غانم العلي والتي تظهر التو ضع الطبقي لتل غانم العلي .

خامساً : القيام بأعمال مسح مكثف للمناطق المجاورة لتل غانم العلي وذلك بهدف إيضاح وشرح تفصيلي للمواقع الأثرية العائدة لفترة البرونز المبكر والمجاورة لتل غانم العلي , وذلك بهدف الحصول على تاريخ ابعده للوجود السكاني في هذه المنطقة منذ عصور أقدم . إذا يمكن القول بان أعمال البعثة السورية اليابانية المشتركة لهذا الموسم قد استهدفت محاولة فهم المدلول الأثري لموقع تل غانم العلي وهو الهدف الجوهرى لمشروعنا الأساسى في هذه المنطقة

مدير الجانب السوري
انس الخابور

مدير الجانب الياباني
كاتسوهيكو اونوما