TALL ABŪ AL-KHARAZ: THE SWEDISH JORDAN EXPEDITION 2013, SIXTEENTH SEASON PRELIMINARY EXCAVATION REPORT

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Introduction

The Swedish excavations at Tall Abū al-Kharaz, a twelve-hectare tall in the central Jordan Valley, continued in 2013 in order to shed further light on the occupational sequence of one of the most dominant cities in the Jordan Valley. The city was first settled around 3150 BC, which corresponds to the conventional Early Bronze Age IB, and subsequently was occupied until Mamluk times (**Table 1**).[1]

Table 1: Synopsis of phases of occupation at Tall Abū al-Kharaz from the Early Bronze Age to the Iron Age.

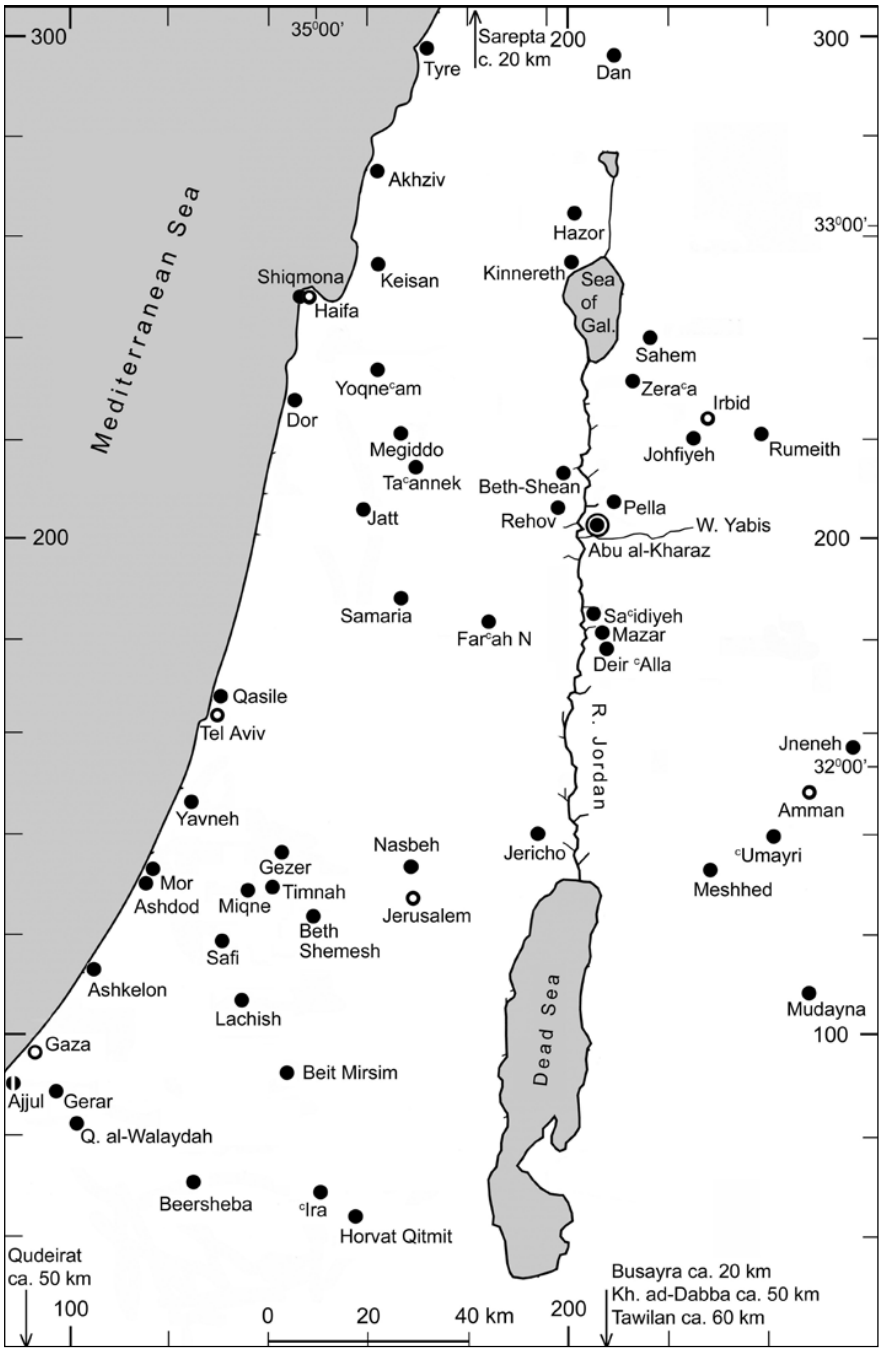
Phases	Dates BC	Periods[2]
IA–B	3150–3050	EB IB
IIA–B	3050–3000	EB II
IIIA–B	3000–2900	EB II
Lacuna	2900–1600	EB III–MB II/III
IV/0	18th century	MBI
Lacuna?		MB II
IV/1	c. 1600	MB III
IV/2	1600–1525	MB/LB
V	1525–1450	LB IA
VI	1450–1400	LB IB
VII	1400–1350	LB IB/C–IC
VIII	1350–?	LB IC–II
Lacuna		LB II
IX	1100–1050	IA IB
X	1050? –930	IA IB/(IIA)
XI	930–850	IA IIA
XII	850–800	IA IIA/B
XIII	800–770	IA IIB
XIV	770–732	IA IIB
XV	732–600	IA IIC

The latest five years of excavations were mainly devoted to the investigation of the complete Iron Age sequence which lasted from the 12th century BC until 732 BC, when the city was conquered by the Neo-Assyrians. The main objective of the 16th season of Swedish excavation at Tall Abū al-Kharaz was to investigate the eastern and south-eastern limits of the city. This includes the area east of the 46 m long two-storey compound (Area 9) from Phase IX (Iron Age I from around 1100 BC) with its 20 m long western annex (see Tall Abū al-Kharaz and other important Iron Age sites in **Fig. 1**; plan of the excavated areas in **Fig. 2**). The excavations of this building began in 2009 and lasted until 2012. A total of 21 basement rooms, which correspond to the lower storey and which were arranged in a cell-plan layout, were exposed (preliminary report in Fischer and Feldbacher 2011; final report Fischer 2013: 264-341). The basement walls of the compound were still standing to a height of more than 2 m. Several hundred complete vessels and other objects point to the extensive contacts of a fairly rich society. Contacts with the Aegean and Cyprus through offshoots of the Sea Peoples/Philistines, and with Egypt and Phoenicia, were ascertained (Fischer and Bürge 2013). At the end of the 2012 season of excavation the eastern limit of the compound was reached. In 2011 a western annex was opened which added additional 20 m to the compound (Fischer and Feldbacher 2010 and 2011; Fischer 2012; Fischer and Bürge 2013).

According to the general objectives two new portions of the tall were investigated in 2013:

1. There are some occupational lacunae of which the longest lasted from the Early Bronze Age III until the Middle Bronze Age (see **Table 1**).

2. Pre-Iron Age periodization according to Fischer 2006: 362-374; Fischer 2008: 340-385; Fischer 2013: 516.

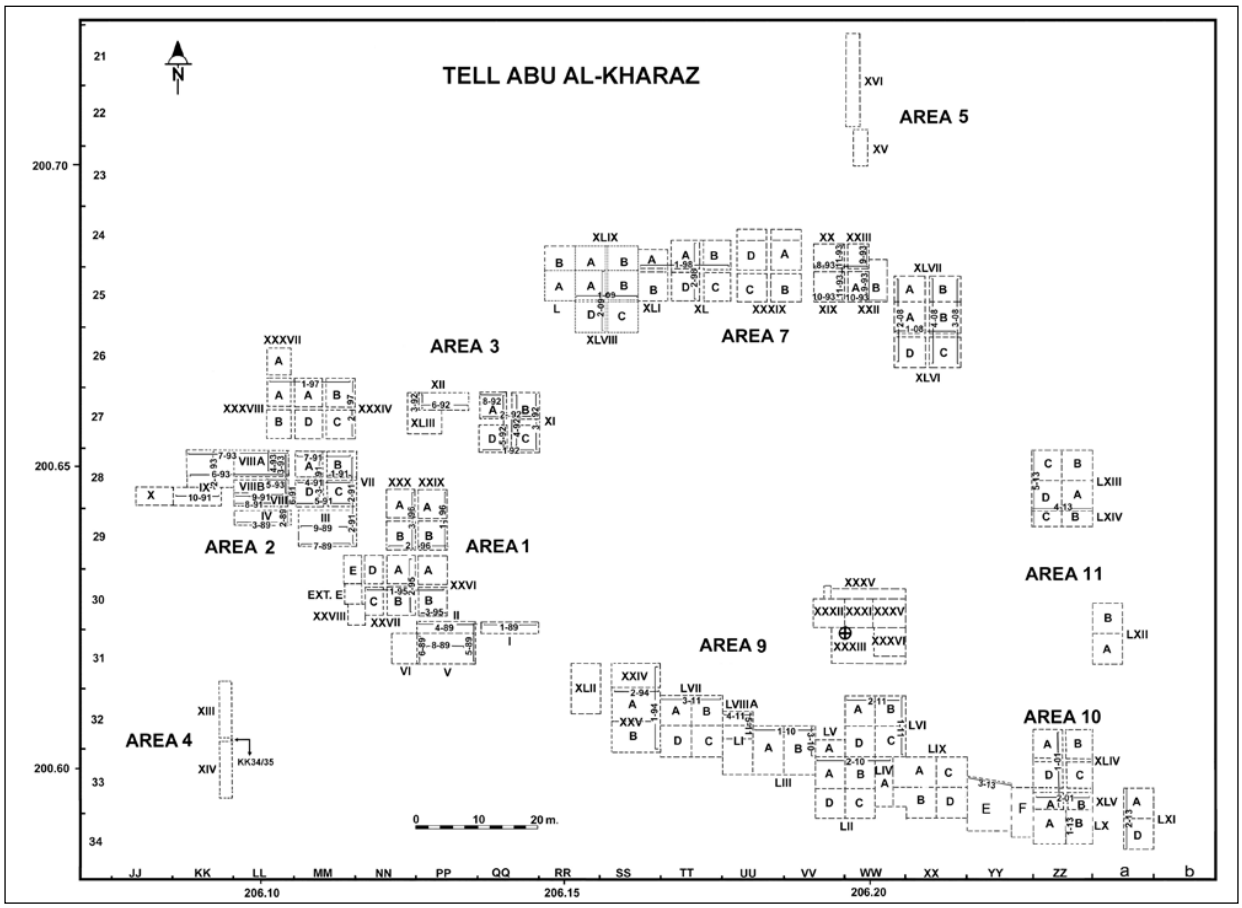


1. Iron Age sites in the Southern Levant.

one is to the east of the compound and include Trenches LIXF (Area 9), LXA and B, and LXIA and D (the latter four are in Area 10). The other is on the eastern edge of the upper plateau of the tall in Area 11: here, our intentions were to explore selected parts in order to trace additional Iron Age structures and a possible continuation of the Phase IX compound from Area 9. The eastern limits of the city have not yet been investigated.[3]

Another important task was consolidation work on the Iron Age I compound, which started in 2010 and was concluded in 2013. The 21 rooms with walls which are still standing to a

3. Information on all investigated areas of the Early Bronze Age can be found in Tall Abū al-Kharaz, Volume 1 (Fischer 2008), the Middle and Late Bronze Ages in Volume II (Fischer 2006) and the Iron Age including the recently uncovered Phase IX compound of Area 9 in Volume III (Fischer 2013).



2. Tall Abū al-Kharaz. Overview of areas, trenches and sections (drawing by M. Al-Bataineh).

height of more than 2 m were cleaned and consolidated with a fairly soft mixture of approximately one-third each of quartz sand, lime and cement.

The excavations at Tall Abū al-Kharaz, financed by the Royal Swedish Academy of Letters, History and Antiquities, were carried out with the kind support of the Department of Antiquities of Jordan from 22 September until 18 October 2013. The 2013 team included P.M. Fischer from the University of Gothenburg (director), T. Bürge (assistant field director), D. Blattner (assistant), H. Ta'ani (foreman, trench master) and M. Al-Bataineh (surveyor, draughtsperson). Trench masters were R. Árnadóttir, D. Kofel, A. Lindqvist and B. Stolle. The representative of the Department of Antiquities was M. al-Shalabi. Additional support was provided by S. Esbeihat (cook), Y. Suleiman Musa (pottery washing) and M. Mohammed Ahmad (transport). Workers from Pella, Mashāri' and Yābis were engaged in the excavations. The Royal Court of Jordan, represented by T.R.H. Prince Raad Ibn Zaid and Princess Majda Raad,[4] and the Swedish Embassy in Amman, headed by the recently appointed ambassador Helena Gröndahl Rietz, visited the excavations.

Areas 9 and 10 (Trenches LIXE and F, Area 10 Trenches LXA and B, and LXIA and D)[5]

Late Roman, Byzantine and Islamic/Abbasid (c. 300–969 AD)

The later Iron Age phases, viz. Phases XII–XIV, were not present because of intensive use

4. The expedition is very thankful for the continued support of Their Royal Highnesses.
5. Phase numbers have only been given to settlement periods from the Early Bronze Age (Phase I) until the Iron Age (Phase XV for the latest Iron Age squatter occupation), i.e. in accordance with the final publications (see Fig. 1).

of this area in Late Roman, Byzantine and Islamic/Abbasid times. The architectural remains are difficult to interpret because of disturbances, rebuilding and the proximity to today's surface.

Iron Age Phase XI (930–850 BC)

The northern part of a walled space which is ascribed to Phase XI has been exposed in Trench LIXE (W697 with parts of the mudbrick superstructure still preserved, W711 and W696). There is a 0.8 m wide entrance in the eastern part of W711. The southern part of this space is not preserved due to erosion. Two hearths belong to this phase.

Phase X (1050–930 BC)

Room P from 2012 was further exposed to the north (W699/725, W722 and W721). It is partly stone-paved. Room Q from 2012 was partially exposed to the north (W697/721, W694/711 and W720). It became evident that the walls and floors of these rooms were built directly on top of the Early Bronze Age II city wall (**Fig. 3**).

Phase IX (1100–1050 BC)

The completely exposed two-storey-cell-plan compound from Phase IX can be seen in **Figs. 4 and 5**. Excavations north of Phase IX Rooms 19, 20 and 21 did not expose additional structures from this phase. The settlers of the following Phase X obviously removed finds from earlier periods down to the top of the Early Bronze Age city wall.

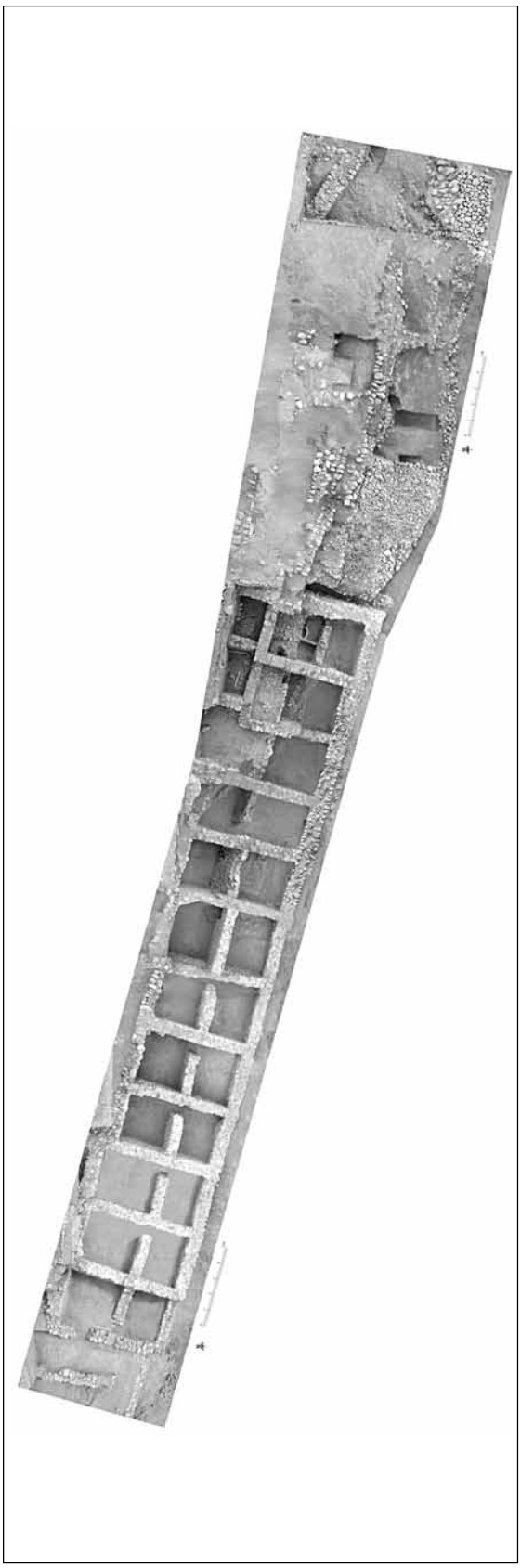
The Iron Age defence system from Phases IX–XII (1100–800 BC)

These trenches are directly east of the Phase IX compound. Sherds from below colluvial soil date exclusively from the Early Bronze Age (sic!), viz. from Phases I and II. These two phases correspond to the conventional Early Bronze Age IB and II, i.e. roughly 3150–3000 BC.[6] It could be shown by meticulous stratigraphic investigation that, around 1100 BC, the builders of the Phase IX (Iron Age I) compound cut through the entire Early Bronze Age defence system and deposited the foundation walls of their structures on the same level as the foundation of the Early Bronze Age defence systems.

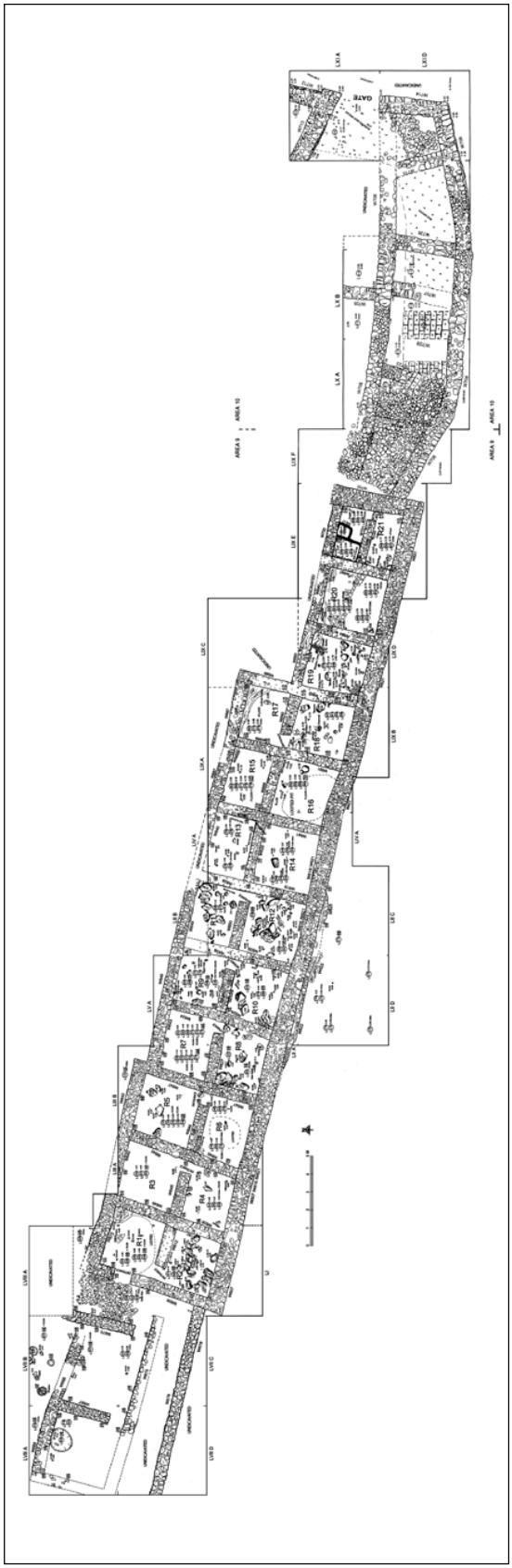
The easternmost wall of the Phase IX compound, W702, was erected approximately 1 m from the Early Bronze Age defence system to the east, which was left intact (**Fig. 5**). After the completion of the two-storey compound the gap towards the Early Bronze Age defence system was filled with stones and mud, which reinforced the Phase IX structures. The original Early Bronze Age structure from Phase II (Early

3. Area 9, Trench LIXE: architecture of Phases IX and X which was built upon the Early Bronze Age II city wall (between red arrows).

6. The Early Bronze Age occupation at Tall Abū al-Kharaz, viz. Phases IA–IIIB, dates from 3150 BC to 2950/2900 BC according to 16 radiocarbon dates; see Fischer 2008: 381-382; Stadler and Fischer 2008; cf. Fischer and Bürge 2013: Table 1 which provides a short description of all phases.



4. The completely exposed Iron Age I compound (Phase IX) and the Early Bronze Age to Iron Age defence system to the east-south-east.



5. Areas 9 and 10: the cell-plan-compound to the left and the Early Bronze Age glacis to the right.

Bronze Age II) was kept largely as it was designed two thousand years earlier and became an integrated part of the Iron Age defence system. The main east-west running walls of the defence system are still preserved to a height of approximately 3 m (to the north) and the section shows a width of 6 m. There are perpendicular, north-south running, walls and the spaces between them were filled with stones thus creating a defence glacis, which slopes steeply towards the south. At the south-easternmost corner of the upper plateau of the tall the glacis turns sharply towards the north (W714), where it is interrupted by a 2 m wide gap – one of the original Early Bronze Age city gates. The city gate is located at the spot of the settlement which is closest to the Wādī al-Yābis (= Wādī al-Rayyān), the most important water resource for the people of Tall Abū al-Kharaz during all periods. It is most likely that the road to the Wādī al-Yābis started here.

The Phase IB/Early Bronze Age IB city wall (3150–3050 BC)

Test trenches demonstrated that the stone-built defence system of Phase II rests on a substantial mudbrick foundation – the first city wall, which was originally built in Phase IB (**Fig. 6**).[7] This confirms identical observations from previous seasons (Fischer 2008: 213-214).

An Early Bronze Age II tomb (3050–3000 BC)

A tomb was uncovered just inside the Phase II city wall (**Fig. 7**). An infant skeleton, facing north-west, with badly preserved bones, was unearthed. It was lying on an ellipsoid bed of carefully arranged pebbles in a flexed position with the arms probably crossed over the chest. The estimated age of the infant is 7±1 years according to the eruption sequence of the permanent and the remaining deciduous teeth. The permanent front teeth show 2–3 lines of enamel hypoplasia close to the enamel-cement border which suggest either periods of illness with high fever or nutrition deficiencies, or both (cf. Fischer 1986:12). There were no personal adornments, and the only tomb gift was a large jar of Grain Wash ware. It was obviously broken on purpose during the funeral but almost complete. This type of jar appears in both Phases IB and II at Tall Abū al-Kharaz (Fischer 2008: 276-278). However, the stratigraphical position of the tomb only allows a date in Phase II, viz. the Early Bronze Age II (3050–3000 BC).

6. Stone-built Early Bronze Age II city wall from Phase II resting on Early Bronze Age IB city wall made of mudbricks from Phase I, Area 10.

Test Trenches in Area 11 (Trenches LXIIA and B, LXIIIA–D and LXIVB and C)

Islamic (Abbasid; 750–969 AD)

Abbasid pottery from a domestic context was found all over the area of the test trenches. The limited exposed area does not allow the attribution of certain structures explicitly to this period. Some structures were reused, others were built in this period. Finds include a tabun and hair pin of bronze.

Late Roman (c. 300 AD)

The interpretation of the Late Roman structures, which were discovered in Trenches LXIIIA–D and LXIVB and C, is incomplete because of limitations in exposure and disturbances, especially from the Islamic period. Nevertheless, there is a well-built structure, strictly oriented north–south / east–west, which was

7. The trenches were backfilled at the end of the season and the original glacis was restored.

entered from the east via a 0.8 m wide entrance. This walled space is preliminarily interpreted as a Late Roman burial place which was reused for domestic purposes in Islamic (Abbasid) times.

Three skeletons were found in the southern part of the exposed area. None show any physical evidence for the cause of death. One is the well-preserved skeleton of a mature female lying in an outstretched west–east position facing south-south-west (**Fig. 8**). She was toothless and suffered from severe degenerative problems with her back and joints, viz. osteoarthrosis. There is evidence of severe osteoporosis which is noticeable, for instance, on the scapulae (lower enlarged photo in **Fig. 8**). Some of her vertebrae show a particular degree of osteophytes formation on the articular surface (marginal lipping; upper enlarged photo in **Fig 8**). This pathological finding is certainly the result of the repeated carrying of heavy loads and other arduous activities, for instance, farming. Her age at death is estimated at around 60 years. The estimation of her stature *in situ* gave 1.6 m. To the west of the mature female is another well-preserved skeleton of an infant lying in an outstretched position facing north. The infant's age at death is within the range of fairly precisely 4–5 years judging by the evolution of the teeth. The erupted dentition consists exclusively of deciduous teeth, 19 in number (tooth 81 is missing). To the south of the mature female is the skeleton of a very young infant, which is poorly preserved . It lay on its stomach in a west–east position. The age at death was 3–4 years to judge from the dentition.

Iron Age Phase XIV (770–732 BC)

A partly excavated walled space of a likely four-room house was exposed in Trenches

7. Early Bronze Age II tomb of an 7±1-year-old infant in Area 10.

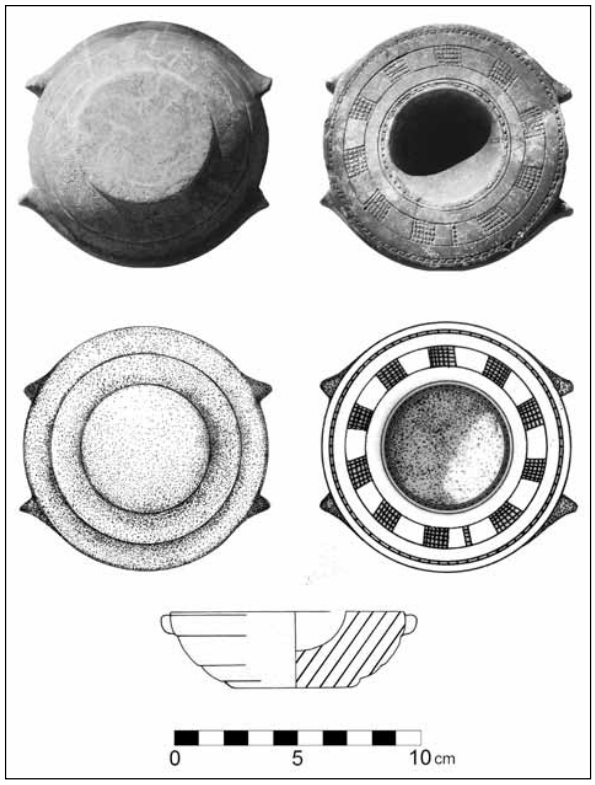
8. Late Roman skeleton of an approximately 60-year-old female from Area 11; upper enlarged: vertebra with marginal lipping; lower enlarged: scapula with osteoporosis.

LXIIIA and D, and LXIVB and C. Several complete finds from this room were embedded in a substantial destruction layer with much ash: four juglets, a complete cooking pot (**Fig. 9**) and a hole-mouth jar, and objects which are related to textile production; i.e. spindle whorls, loom weights and shuttles. An extraordinary find is represented by an intact cosmetic palette of limestone (**Fig. 10**) which adds to the three which were discovered during previous season (two of limestone and one of alabaster). The palettes had a double function: they were – as the name implies – used for grinding and mixing cosmetics (or medicines) which would have been placed in the central depression but they also functioned as lids for a (perishable) container when turned upside down (see reconstruction in **Fig. 11**). Other finds to the north of the house are an iron dagger and an iron arrowhead, and another juglet.

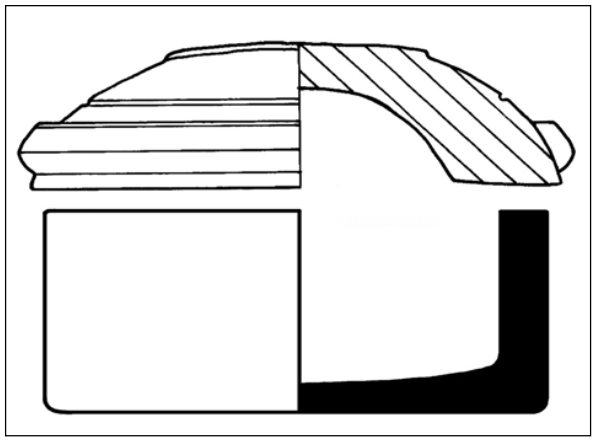
Phase XIII (800–770 BC)

This phase of occupation is represented in Trenches LXIIIA–D and LXIVB and C. The function of several, only partly excavated, walls and stone pavements to the north cannot be interpreted. A small test trench was opened up inside the Phase XIV room (see above). Two interesting finds, which so far are unique at the site, were retrieved from below the floor level of Phase XIV: one is a bichrome-decorated jug (**Fig. 12**), the first of this type from the site, and the other a pierced stamp of limestone with an incised sign (**Figs. 13 and 14**).

9. Iron Age IIB cooking pot from possible four-room-house in Area 11, Phase XIV.



10. Cosmetic palette from Phase XIV, Area 11.



11. Reconstruction of a cosmetic palette used as a lid.

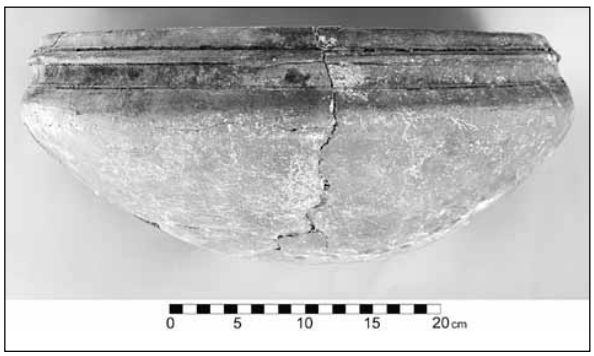
Phases IX or X (1100–1050 BC / 1050–930 BC)

This period is represented in Trenches LXIIA and B in the shape of a walled, trapezoidal space. This space contained a mortar of limestone where dark lilac pigmenting on the interior suggests that black olives were crushed there. Another find is an almost complete, typical Iron Age I cooking pot with a triangular rim section (**Fig. 15**). To the south is another walled space from which a scarab of turquoise or serpentine derives (**Fig. 16**).

12. Bichrome-decorated jug from Phase XIII, Area 11.

13. Pierced stamp of limestone with incised sign from Phase XIII, Area 11.

14. Stamp and impression of stamp.



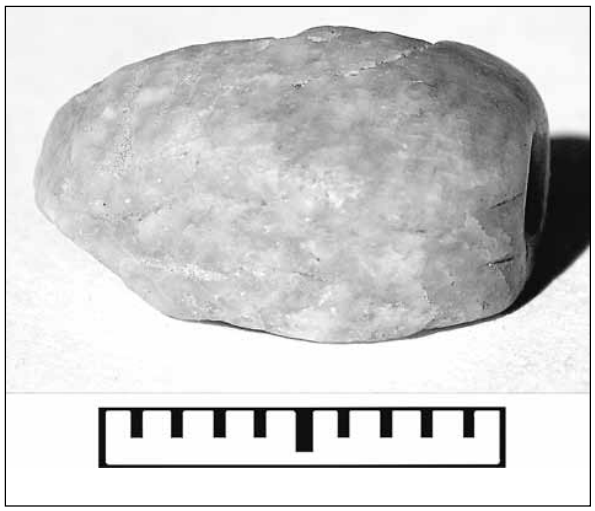
15. Iron Age I cooking pot from Phase X or IX, Area 11.

Late Bronze Age Phase V (1525–1450 BC)

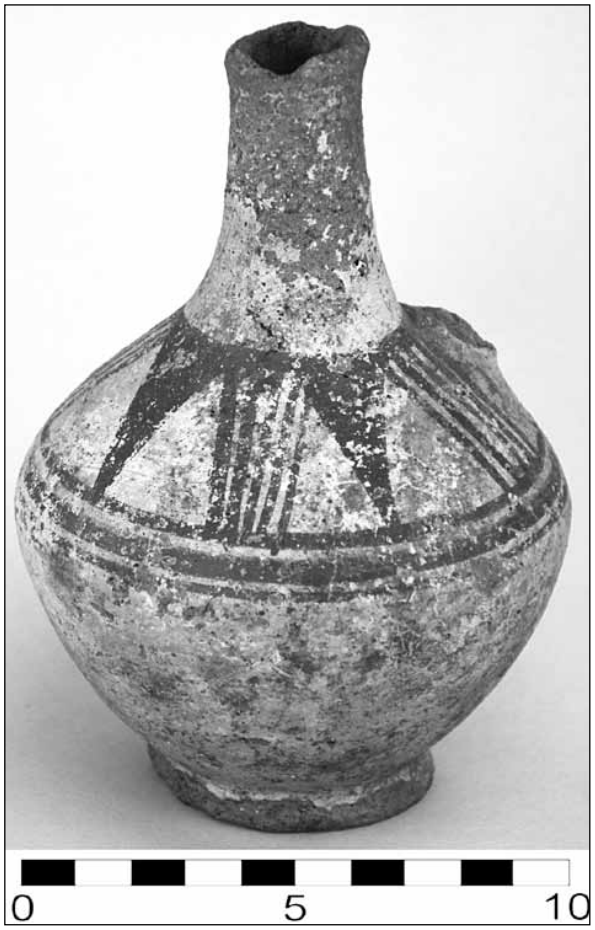
A test trench was dug below the Phase XIII remains. A well-preserved domestic context was exposed which contained several complete finds. According to the pottery this context is clearly Phase V, viz. the beginning of the Late Bronze Age: there is, for instance, a Chocolate-on-White Ware juglet with a thick white burnished slip and the typical abstract tree motif included in a metope decoration (**Fig. 17**). All the finds were embedded in a substantial destruction layer.

Conclusions

One of the most important discoveries from 2013 is the defence system from Early Bronze Age which was reused during the Iron Age (Areas 9 and 10). Around 1100 BC, the settlers of



16. Scarab of turquoise or serpentine from Phase X or IX, Area 11.



17. Chocolate-on-White Ware juglet from kitchen of Phase V, Area 11.

Phase IX cut through the entire Early Bronze Age II defence system from c. 3000 BC and deposited the foundation walls of their substantial two-storey compound on top of the Early Bronze Age II stone-built city wall. Although originally constructed 2000 years earlier the Early Bronze Age II glacis, which was reinforced with perpendicular walls – its section being 6 m long and 3 m high[8] – was kept largely as it was designed around 3000 BC and became an integrated part of the Iron Age defence system.

At the south-easternmost corner of the upper plateau of the tall an opening in the Early Bronze Age II glacis represents a city gate. The gate is conveniently located at a spot which is closest to the Wādī al-Yābis, the most important water resource for the people of Tall Abū al-Kharaz during all periods, and it is to be expected that the road to the Wādī al-Yābis started here. Specific observations during previous seasons, namely that the stone defence system of the Early Bronze Age II was assembled on top of a substantial mudbrick foundation constructed in the preceding period, the Early Bronze Age IB, were once again confirmed.

Test trenches were opened in Area 11, the objectives of which were to explore the easternmost part of the city. These trenches were quite rewarding, considering the small exposed area. Remains from Islamic/Abbasid, Late Roman, Iron Age and Late Bronze Age were found. The Islamic structures from around 900 AD are domestic in nature. The Late Roman structure from c. 300 AD is preliminarily interpreted as a burial place, where three skeletons without tomb gifts were found. The Iron Age in these test trenches is represented by Phases XIV (770–732 BC) and XIII (800–770 BC). The former revealed a part of a probable four-room house with some extraordinary finds: one is an elaborate cosmetic palette of limestone with geometric incisions, and another an iron dagger. Phase XIII produced a vessel of high quality which so far is unique at the site: it is bichrome-decorated in red and black and has fairly large vertical handles and a pointed base. Another find from Phase XIII is a pierced stamp of limestone with an incised "sign" which it has not been possible to decipher so far.[9]

8. Three metres in height as preserved. The original height of the Early Bronze Age II defence system has been estimated at 6–8 m including the superstructure of mudbrick and wood (Fischer 2008: 345).
9. It may also be a decorative symbol without any meaning.

A test trench between Phase XIII walls revealed remains from the beginning of the Late Bronze Age, viz. Phase V (1525–1450 BC). The context contained several complete finds, amongst them being a Chocolate-on-White Ware juglet with a thick white burnished slip and the typical abstract tree motif included in a metope decoration in chocolate-brown colour, a frying pan and a cooking pot and other objects. All finds were embedded in a substantial destruction layer, which confirms our earlier observation that Phase V was destroyed by a severe conflagration that obviously affected the entire city: the same situation was found, for instance, in the westernmost exposed part of the tall, namely in Area 2 which is approximately 150 m to the west of Area 11. It has been suggested in previous publication that Phase V at Tall Abū al-Kharaz was destroyed during a warfare campaign of Tuthmosis III or possibly Amenhotep II (Fischer 2006: 372-373).

One could assume after 16 seasons of excavations that, in principle, the entire occupational sequence of Tall Abū al-Kharaz and the typology of finds would be well established. Nevertheless, the latest four seasons of excavations brought to light new evidence on the historical periods following the Iron Age, and the beginning of the Iron Age, and numerous remarkable finds.

Appendix 1: Three Burials at Tall Abū al-Kharaz, 2013

By A. Lindqvist and B. Stolle

Introduction

During the Swedish Jordan Expedition of 2013 remains of three humans were exposed in close proximity to each other on the eastern side of Tall Abū al-Kharaz. All the skeletons lay at approximately the same level. They were found inside one of the rooms, which was enclosed by the walls W727 and W731. In the centre of this space there was a circular structure built of three courses of stones. The first skeleton (Skeleton 1) was discovered when removing the circular stone construction, which had been placed on top of and around the *cranium*. Further exposure revealed the presence of a complete adult skeleton. Another two skeletons of infants were uncovered nearby, to the southwest of Skeleton 1. The object of this appendix is to present and investigate the skeletal remains in their context at Tall Abū al-Kharaz.

Skeleton 1 – The adult

The skeleton was positioned west to east, with the head towards the west and facing southwest. It was lying on its right side, in an almost straight position and bent very slightly backwards. The hands were placed together in front of the waist. The bones were generally in a very fragile state. The right (lower) side was better preserved than the left (upper) side, but very few bones were complete. The grave contained no gifts, but some potsherds were found in the fill. The majority of them date from the Late Roman/Islamic period. Most bones are accounted for. Missing bones are most likely explained by post-burial taphonomic processes. Closer examination of the skeleton's condition indicates that this individual must have been of an advanced age, probably over 50 years old.

The position of the *cranium*, upper *vertebrae* and *costae* suggests that the person suffered from *kyphosis* (or roundback, viz. over-curvature of the *thoracic vertebrae*). This would also explain the angle of the skeleton, bent to fit the person into the grave. Traces of *osteoarthritis* were detected on several *vertebrae*, mainly the lumbar vertebrae (especially the last), right *metacarpals* and right *radius*. The right *scapula* shows signs of *osteoporosis*. No teeth remain and considering the healed process of the *mandibula* and *maxilla*, they must have been lost a considerable time *ante mortem*. There is evidence of a healed wound (possibly a cut) on the right *tibia*. The left *humerus* shows an abnormal growth of the bone. An examination of the pelvic and facial outlines suggests that the skeleton is most likely female. Calculations based on the only complete longer bone, the right *fibula*, give a height for the individual of approximately 166 cm (White 2012: 420).

Skeleton 2 – Child 1

The skeleton was positioned west to east, with the head towards the west and facing north. It was lying on its back with a slight turn towards its left side. The torso is otherwise straight, while the legs are bent at the waist and knees. Given the raised position of the right *femur* and feet, it is plausible that the original position of

the legs had been shifted from a raised position to the side (*post mortem*). The arms are bent and placed on the left side with the hands in front of and underneath the *cranium*. The skeleton is in good condition with a few exceptions, such as the *femora*, lower *vertebrae* and the right side of the *pelvis*. Based on skeletal growth and dental status the age is estimated at six years, which does not permit determination of the sex. There is a small hole on the right side of the back of the *cranium*, which probably occurred *post mortem*. The *os temporale* on the right side is dislocated and pushed inwards. The deciduous tooth 51 is dislocated, with its root misplaced and visible. The *mandibula* also shows signs of damage where the deciduous tooth 81 is missing. There are no burial gifts, but here, too, some Late Roman/Islamic potsherds were found in the fill of the grave.

Skeleton 3 – Child 2

The skeleton was placed in a west to east position, with the head towards the west. The fragmented state of the skeleton made it impossible to determine in which direction it was facing. It could however be determined that it was placed on its stomach. The preserved parts of the legs and their position in the relation to the edge of the grave indicate that the lower parts of the legs were raised. Only certain parts of the skeleton could be recovered, such as five teeth, right *scapula*, both *humeri*, three *phalanges*, left *ulna*, three *costae*, five *vertebrae*, both *femora* and fragments of the *pelvis* and *cranium*. Possible abnormal growth of bone tissue was detected on the upper part of the right *femur*. From the teeth the age could be estimated at three to four years. As with child 1, sex determination was not possible due to the young age of the individual. There was no visible cause of death. Like the other two graves, this one contained no gifts, and similarly it contained potsherds of Late Roman/Islamic type.

Discussion and conclusion

The clear outlines of the cuts and the similar placement of the bodies within suggests that we are dealing with deliberate burials in a portion of a possible cemetery. Given the similar height, material content and orientation of the graves it is likely that these graves are contemporary. The lack of burial gifts makes dating more difficult. However the heights of the graves above the Late Iron Age structures found in the area, the pottery and the absence of gifts indicate one of the later occupational phases of Tall Abū al-Kharaz. At the same time the burials can be dated earlier than the Islamic phase, since they do not follow the traditional Islamic burial position. These factors imply that the burials have taken place during the Late Roman period, which is well represented at Tall Abū al-Kharaz.

The circular stone construction above the cranium of Skeleton 1 is interpreted as a possible grave marker, since the stones were closely placed around the underlying *cranium*. The other two burials contained no grave markers. The varying positions of the skeletons demonstrate that there was no standardized burial position. The uncommon placement of Skeleton 3, Child 2, suggests quite a careless burial. We would also like to present the hypothesis that the individuals might be related to each other. One should, however, note the considerable difference in age between the individuals. If related they should be two generations apart. The closeness of the graves and the similar dating could support this theory. The different burial positions and the careless burial of Skeleton 3 could suggest otherwise. So far no DNA analysis has been performed to determine any genetic relationship. Further excavation in a wider area is needed to investigate the nature of the burials and their surroundings.

Appendix 2: The Lithic Assemblage from Tall Abū al-Kharaz, 2013

By D. Kofel

Introduction

The analysis of flint artefacts is a useful tool that sheds light on ancient trade and exchange, craft specialization, and local production. There are a number of studies of the prehistoric lithic industries in the Levant, both in older (e.g. Siggers 1997; Bisson *BC* in press) and in younger periods (Raszick 2006, 2008). In this study, a short overview and the interpretation of the flint artefacts that were collected in 2013 are presented.

Material and Method

The material analysed is a total of 33 flint artefacts from 22 different loci (see **Fig. 18**, **Table 2** where also dates are presented). Most of the material was collected from the loci that are dated to Tall Abū al-Kharaz Phases XIII and XIV, viz. roughly 800–732 BC (Fischer 2013: 516). One flint knife was found in a Phase V, Late Bronze Age I, context dated to approx. 1525–1450 BC. Some lithics are certainly residual. No quantitative evaluations of the classified material were carried out, due to the insufficient number of objects.

Classification of the Lithic Tools

The material is dominated by sickle blades and knives. The ratio of blades to knives is approximately 1:1. The knives have been knapped using various techniques. Their cross-sections are either triangular or trapezoidal. They have one or two cutting edges, of which some of them are glossy due to use-wear.

Canaanean blades

Sickle blades (**Fig. 18**, nos: 3, 7, 10, 11 in **Table 2**) display the Canaanean blade technology. They have trapezoidal or triangular cross-sections (Rosen 1983b:16) and minor retouching on the working edges that are sometimes found with gloss. They are usually associated with the Early Bronze Age (Rosen 1982), although recently some authors have suggested earlier occurrence of Canaanean technology, i.e. during the first quarter of the 4th millennium BC at the transition from the Chalcolithic to the EB I (Bar and Winter 2010: 34). Canaanean blades are widely distributed in the southern Levant (Milevski 2013: 207) until they disappear in EB IV / MB I (Rosen 1997: 41). The contexts from which our blades derive are in any case much later.

Tabular scrapers

One tabular scraper (**Fig. 18**, no. 19 in **Table 2**) is present in the assemblage. Consistent with the standard definition it is a large, broad and thin flake struck from a large plaque of flint with the intact cortex on the surface (Milevski 2013: 209). Tabular scrapers appear in the central and southern regions of the Southern Levant during Pottery Neolithic B. They were in use until EB III (Rosen 1983a, 1997: 41).

Discussion and conclusion

It seems that the lithics from Loci 415, 453, 468, 473 and 494 are residual and were most likely manufactured in the Early Bronze Age. They might have been found by later settlers and reused. Previous studies of lithic material from Tall Abū al-Kharaz (Raszick 2006, 2008) show that, although their number decreases, Canaanean blades and tabular scrapers are still present in Middle and Late Bronze Age contexts.

Although use-wear analysis has not been carried out it can be assumed that the knives were most probably used in daily activities such as cutting and preparing of meals. It may be that the knives were knapped on the site when they were needed. Some of our fills consisted of flint material, mainly blades and flakes, that might be production waste. This is in agreement with previous lithic studies from Tall Abū al-Kharaz (Raszick 2006). She describes a type of large geometric sickle segment that occurs in the Middle Bronze Age through the early Iron Age II (Raszick 2006: 294) and suggests that Area 2 at Tall Abū al-Kharaz might have been a place of lithic tool production. A similar model can be suggested for the aforementioned knives with a differing chronology: the production of the knives could have occurred during advanced phases of the Iron Age.

To conclude, the finds once again confirm that farming was the backbone of the economy of Tall Abū al-Kharaz. Some of the tools may have been used for slaughtering. Use-wear analysis should be carried out in order to support these statements.

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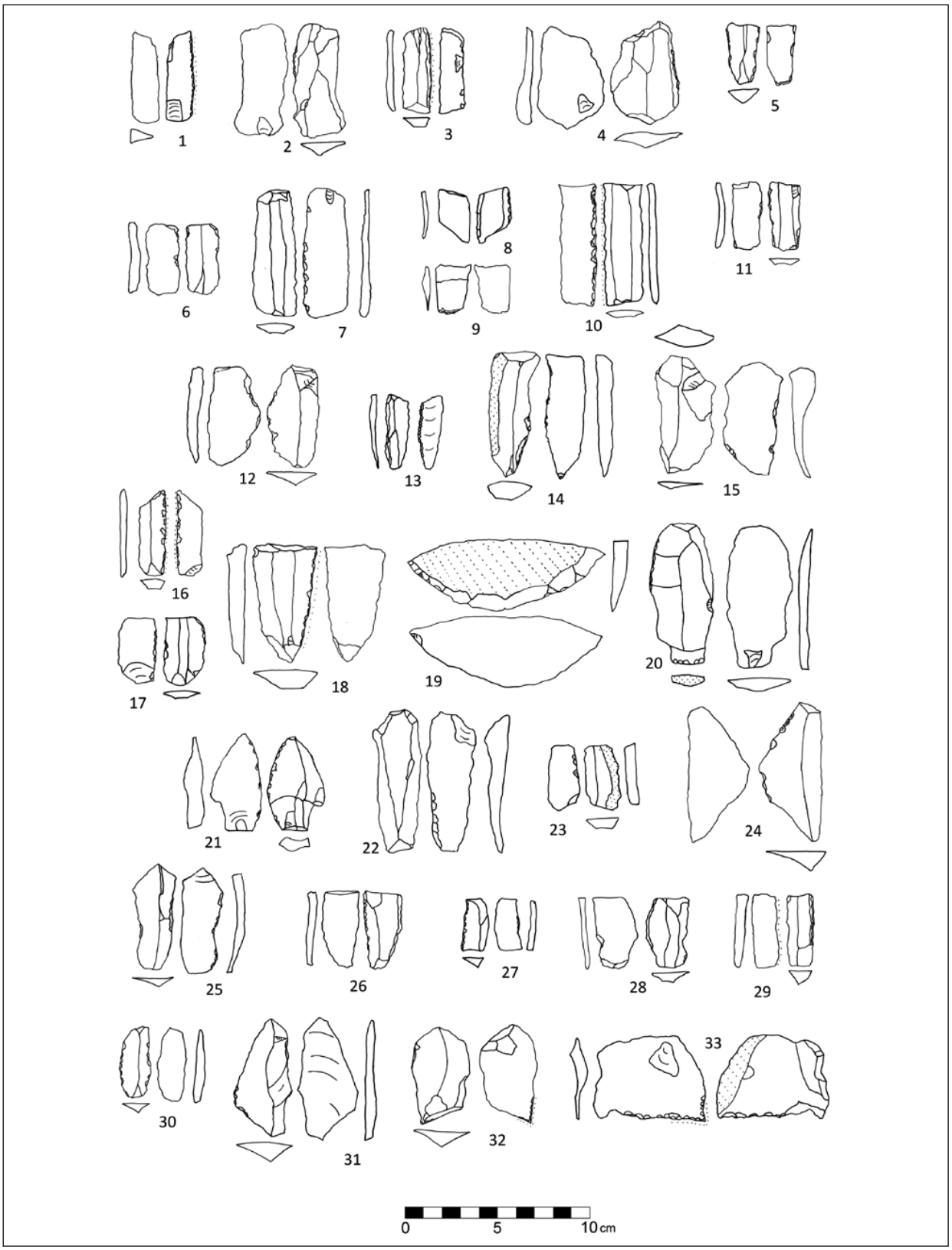

18. Sickle blades: 1, 3, 5, 6, 7, 8, 9, 10, 11, 13, 16, 17, 23, 26, 27, 29, 30; Knives: 2, 4, 12, 14, 15, 18, 20, 21, 22, 24, 31, 32, 33; Blades: 17, 23; Retouched blades: 25, 28; Tabular scraper: 19

Table 2: The lithic assemblage of Tall Abū al-Kharaz

No	Artefact	Locus	Phase	Periods	Dates BC
1	Sickle blade	412	post IA		
2	Knife	414	post IA		
3	Sickle blade	415	post IA		
4	Knife	415	post IA		
5	Sickle? blade	450	XIV	IA IIB	770–732
6	Sickle blade	453	XIV	IA IIB	770–732
7	Sickle blade	453	XIV	IA IIB	770–732
8	Sickle blade	461	XIV	IA IIB	770–732
9	Sickle blade	462	XIV	IA IIB	770–732
10	Sickle blade	468	XII?	IA IIA/B	850–800
11	Sickle blade	473	post IA		
12	Knife	483	XII?	IA IIA/B	850–800
13	Sickle? blade	484	XIV	IA IIB	770–732
14	Knife	484	XIV	IA IIB	770–732
15	Knife	486	XIV	IA IIB	770–732
16	Sickle blade	488	XIII?	IA IIB/?	800–770
17	Blade	488	XIII?	IA IIB/?	800–770
18	Knife	490	XIII	IA IIB	800–770
19	Tabular scraper	494	XIII	IA IIB	800–770
20	Knife	495	XIV– post IA?		
21	Knife	496	X-XIII?	IA IIB/?	800–770
22	Knife	501	XIII	IA IIB	800–770
23	Blade	506	XIV	IA IIB	770–732
24	Knife	508	V	LB IA	1525–1450
25	Retouched blade	510	XIII	IA IIB	800–770
26	Sickle? blade	518	XIII	IA IIB	800–770
27	Sickle? blade	518	XIII	IA IIB	800–770
28	Retouched blade	518	XIII	IA IIB	800–770
29	Sickle blade	520	XIII	IA IIB	800–770
30	Sickle blade	520	XIII	IA IIB	800–770
31	Knife	520	XIII	IA IIB	800–770
32	Knife	520	XIII	IA IIB	800–770
33	Knife	520	XIII	IA IIB	800–770

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