The Swedish Jordan Expedition 2014 at Tall Abu al-Kharaz

Preliminary results from Areas 12 and 13

Abstract**

In previous seasons excavations have concentrated on the periphery of the city of Tall Abu al-Kharaz, a multi-period tell in the Central Jordan Valley. Tall Abu al-Kharaz flourished from the Early Bronze to Islamic times, from roughly 3200 BC to the 10th century AD. The main object of the field work in 2014 was to investigate the area around the geographical centre of the city (Area 12). Preference was given to further investigation of the Iron Age sequence, i.e. the period from the 12th to the 7th centuries BC (local Phases IX-XV). Another task was to extend the excavations in the northern part of the city, Area 7, which produced essential information on the Iron Age, towards the south (Area 13) in order to generate a coherent picture of Iron Age occupation in the city's northern half. Domestic structures and a system of fortified walls were uncovered. The rich find assemblage confirmed connections with the Cypriote and Phoenician sphere of culture. The exposure of the remains in general stopped when Late Bronze Age levels were reached. Nevertheless, remnant "islands" of Late and Early Bronze Age remains, left aside by the Iron Age settlers, were uncovered. A burial pit with the skeleton of a female from Byzantine or Abbasid times was found in Area 12, cut into Iron Age layers.

Keywords: Jordan Valley, Iron Age, Bronze Age, burial, textile production, defence wall, pottery

Introduction

The main objectives of the 17th season of the Swedish excavations at Tall Abu al-Kharaz (see location of the site in the Southern Levant in *Fig. 1*) were further studies of the Iron Age settlement sequence and the exploration of the area around the geographical centre of the city on the upper part of the tell as a complement to the previously investigated areas along the city's periphery (*Figs. 2, 3*).¹ Two 10 m by 10 m trenches were opened: the first, Trench LXVA–D, is in Grid SS/TT 30, and the second, Trench LXVIA–D, in Grid RR/SS 29/30. In the course of the excavations Trench LXVI was extended southwards as a result of contexts with rich finds in its southern part (Trench LXVIE, 5 m × 7.5 m, in Grid SS 30/31; and Trench LXVID, 8.5 m × 5 m in Grid RR/30). The total size of Area 12 is 280 square metres (*Fig. 4*).

Area 7 in the northern part of the city produced wealthy Iron Age contexts in previous seasons.² These include several two-storey, four-room houses which were destroyed by the Neo-Assyrians, who brought the flourishing Phase XIV to an end in 732 BC. In order to generate a coherent picture of Iron Age occupation in the northern half of the city an additional trench, Trench LXVIIA–D, was opened in Area 13, which is between Areas 7 and 12. This trench is in Grid TT/UU 26 and is 100 square metres in size.

^{*} Recipient of a DOC Fellowship at the Institute for Oriental and European Archaeology, Department for Egypt and the Levant, Austrian Academy of Sciences.

^{**} Acknowledgements

The excavations at Tall Abu al-Kharaz, once again kindly financed by the Royal Swedish Academy of Letters, History and Antiquities, were carried out with the support of the Department of Antiquities of Jordan in September and October 2014. The 2014 team included Professor 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 Dr S. Chandrasekaran, M. Adelhofer, E. Heiss, S. Lauscher and L. Marstorp. The representative of the Department of Antiquities, and recently appointed inspector of Pella, was M. Es-Shalabi from whom much practical help was gratefully received. Logistical support was provided by S. Esbeihat (cook), Y. Suleiman Musa (pottery washing) and M. Mohammed

Ahmad (transport). Nine loyal local workers with much experience from previous field seasons came from Pella, Mashare'a and Yabis. The Royal Court of Jordan, represented by T.R.H. Prince Raad Ibn Zaid and Princess Majda Raad, and the personnel of the Swedish Embassy in Amman, headed by Ambassador Helena Gröndahl Rietz, all of whom showed great interest in the project, honoured the expedition by their annual visit.

¹ See e.g. Fischer & Bürge 2014.

² Fischer 2013, 141–248.

Table 1. Phasing of Tall Abu al-Kharaz.³

Phases	Duration BC	Periods
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	MB I
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
Х	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
	c. 4th cent. AD	Roman
	c. 4th–7th cent. AD	Byzantine
	c. 8th–10th cent. AD	Islamic/Abbasid



Fig. 1. Selected Iron Age sites in the Southern Levant (drawing by T. Bürge).

³ The absolute Iron Age chronology is based on 44 dated radiocarbon samples, of which two are outliers; Wild & Fischer 2013, where these dates are discussed in detail. Pre-Iron Age periodization according to Fischer 2006, 362–374 and 2008, 340–385. Iron Age periodization according to Fischer & Bürge 2013, 501–512; Fischer 2013, 512–516.



Fig. 2 (above). Tall Abu al-Kharaz. Topographic map with overview of areas, trenches and sections (drawing by M. Al-Bataineh and T. Bürge).

206.10

Fig. 3. Aerial photograph of the upper part of the tell looking north with Areas 7 and 9–13 indicated. Iron Age I compound in fore-ground (Area 9), White Building in centre (Area 10) and the areas from 2014 (Areas 12 and 13) to the west (by P.M. Fischer and T. Bürge).



¢

im. 206.20

D

B D

206.2

Results from the excavations in Area 12 (Trenches LXVA–D and LXVIA–E; *Figs. 5* and 6)⁴

POST-IRON AGE: ISLAMIC/ABBASID? (8TH–10TH CENTURIES AD)

Several structures belonging to Phases XIV and XIII were affected by a roughly $3.5 \text{ m} \times 1.5 \text{ m}$ large pit (A in Fig. 4). The pit cut down approximately 1.5 m from topsoil causing the destruction of the western ends of W751 (Phase XIV) and W759 (Phase XIII). The disturbance also affected the massive W754 (Phase XIII) further west, which was cut 1 m wide and 1.3 m deep down to its foundation on its western façade (Fig. 7 upper right). A human skeleton without any grave goods was found at the bottom of the cut, lying on a bed of clay (Fig. 7). The cut has been backfilled with disarranged stones intermingled with soil. The most recent sherds from the area of the burial are probably from Abbasid times.⁵

The skeleton lay on its back/slightly on its right side in an outstretched position with its head facing south-east, i.e. approximately towards Mecca. It came as a surprise that the upper parts of the pharynx/larynx were preserved due to mummification or partial ossification *intra vitam*. The left arm was bent whereas the lower positioned right arm lay outstretched under the body. Only the two femurs could be exposed whilst the remainder of the legs lay be-

low the deep backfilled disturbance in close proximity to W754.⁶ Preliminary osteological analyses point to a 30-year-old individual with mainly female characteristics. This statement is based on the following observations: the fairly flat nuchal crest, the mastoid process (which is quite pronounced, however), the sharp supra-



Fig. 4. Aerial photograph of Area 12 looking west. "A" shows the area of the burial which disturbed two walls; "B" and "C" show the massive (reused) Phase XIII walls (W754 and W768 respectively). A gate is in W754 ("B"; by P.M. Fischer and T. Bürge).

orbital margin, the flat supraorbital ridge, the shape of the orbitas (not very conclusive) and the mandible, and the small teeth together with indications from other post-cranial bones. All the teeth are preserved. They are not decayed and the recession of marginal bone (periodontitis) is moderate.⁷ The age, around 30 years, was mainly estimated by tooth wear and the closure of sutures. There are three clearly visible perforations of the cranial bone, but only on her right side (see arrows

⁴ Following earlier practice the phases are presented as excavated in this preliminary report (in contrast to the final report). 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 (*Table 1*; see also note 3).

⁵ There are only few sherds in the fill around the skeleton, some of which may well belong to Byzantine–Umayyad periods.

⁶ There was no time to expose the entire disturbance. In addition, its removal would have risked the stability of the massive Wall 754.

⁷ Future X-rays are necessary in order to establish a correct diagnosis; cf. Fischer 1986.



in *Fig.* 7).⁸ The assessment of the cause of her death (disease, trauma, or a combination?) requests additional investigations including radiological examination. There seem to have been specific motives in hiding the corpse below a massive ancient wall.

IRON AGE

Phase XV (732-600 BC)

Phase XV, which is considered as a phase where squatters lived at Tall Abu al-Kharaz after the major catastrophe of the Neo-Assyrian invasion which brought Phase XIV to an end in 732 BC,⁹ is essentially on the surface or just below colluvial soil (*Fig. 8*). The majority of or even all the stone structures which were used in this phase are of older date. To the west there is an

obviously open space (L6) which is limited by W752, W772 and W755. Two ovens are preserved in this space: one is 0.65 m in diameter and the other 0.55 m. A complete storage jar (L6-1; *Fig. 9:2*)¹⁰ was found next to the ovens. A large disturbed area (L20), which contained a faience bead (N1487), lies to the north and a 0.8 m wide circular pit is to the south (L18).

The massive W754 with a 1.6 m gate should be ascribed to Phase XIII (see below and B in *Fig. 3*) but created, together with W753 and W752, likewise reused, a large open space. There are no finds of interest from this area due to its position close to the surface. To the east of the reused W754 are at least two spaces separated from each other by W751. Not much is left of the northern space due to its closeness to the surface but the southern space shows remains of a pavement and a stone bench. Several finds derive from the south-eastern area: a red-

⁸ The right (lower) side was not exposed to digging tools.

⁹ Fischer 2013, *inter alia* 501.

¹⁰ Volumes of complete vessels are indicated on the drawings.



Fig. 7. Remains of individual from Area 12. White arrows point to three places where the cranial bone has been penetrated by a pointed weapon; black arrow shows the rarely preserved pharynx/larynx (photographs by P.M. Fischer).

slipped bowl (L9-7), two jugs (L9-4, -5), an intact black juglet (N1483; *Fig. 9:1*), three cooking pots (L9-1, -2, -3), a small stone grinder (N1481) and a bronze bracelet (L9-6).

A spool-shaped stone weight (N1480; *Fig. 23:1*), possibly used as a loom weight, was found on the transition from colluvial soil to L1, on top of the stone pavement.

Phase XIV (770-732 BC)

This is the best preserved phase in the area although it suffered from a major destruction: layers of ash, burned pottery and carbonized organic remains, and blackened walls are everywhere. There are numerous spaces bordered by stone walls of around 1 m in height (*Fig. 10*). The walls are either built in this phase or reused. There are five spaces in the eastern part of the exposed area, a "passage" in the central part, five spaces, both roofed and open, belonging to one compound in the western part and the remains of another compound in the northern part.

W785, W764, W756, W757, W758 (?), W760 and W759 were built in the Late Bronze Age (see below) and reused in Phase XIV. W751' was reused in Phase XIV (see its continuation in Phase IX or X as W761). There is a large pit (L23), extending at least 2.5 m × 1 m, west of W757 and north of W756, where a large bowl with red decoration (L23-1, possibly Early Iron Age) was found. There is another pit along the eastern façade of W757 (L46). Floors associated with these walls were not preserved north of W758 and the pottery from this area is—in addition to Iron Age II sherds (e.g. the krater L12-2)—mainly from the Early Iron Age (L21-1, cooking pot), the Late Bronze (L11-1, a fragment of a bichrome decorated bowl; L12-1, a fragment of a bichrome decorated closed



Fig. 8. Plan of Area 12, Phase XV (drawing by M. Al-Bataineh).

vessel), and the Early Bronze Ages (L22-1, a ledge handle of a jar with potters' marks), although there is also some Iron Age II pottery. A krater (L10-1) derives from the space south of W758, north of W759 and west of W760, approximately 1.5 m wide and at least 4.6 m long (L10). A small stone-lined pit (L36; c. 0.9 m \times 0.9 m) was dug against the north-eastern corner of this space.

The area south of W751' (L13, L26) contained an incense cup (L13-1). A stone-lined silo (L27; diameter approximately 1 m) was in the southernmost part of the exposed area. It contained a carinated bowl manufactured in the Neo-Assyrian style (L27-1).

The "passage" between W752 and W754—both walls are reused from older phases (see below)—can only tentatively be ascribed to Phase XIV: next to W752 there was a circular ash hearth with a diameter of 1.2 m (L19). Finds from this space include a cooking pot (L5-1), an incense cup (L8-1; *Figs. 14:2* and *17:3*), a jug which resembles Phoenician vessels (N1484) and a bronze nail or pin (N1482).

There are two compounds in the western part of the exposed area: of the northern compound only the southern-



Fig. 9. Selected finds from Area 12, Phase XV. Black juglet (1) and storage jar (2) (drawing by M. Al-Bataineh, photographs by T. Bürge).



Fig. 10. Plan of Area 12, Phase XIV (drawing by M. Al-Bataineh).

most corner, enclosed by W766 and W767, could be excavated. It was partly stone-paved in the south-east. The area north of it (L48, L62) contained several doughnut-shaped loom weights of unfired clay (L48-1), a circular stone weight (L48-2) and a kohl stick of bronze which is tentatively ascribed to Phase XIV because of its find level (N1489; *Fig. 11*).¹¹ Another feature is a kind of grinding installation made of two large slabs of basalt which are flat and slightly curved at their ends. A fragment of a glass flask (L53-1; *Fig. 12*) was found west of the pavement in a test trench (L53, L60). The western part of this building is not preserved due to erosion.

A small oven (L16'; diameter 0.6 m) was found in the approximately 2.2 m wide passage between the two buildings against W755. The function of the scarcely preserved wall W769 is not yet clear from its only partial exposure.

Five walled spaces of the southern compound were excavated and the total size of the building as exposed is approximately $10 \text{ m} \times 10 \text{ m}$ (outer dimensions). The north-eastern

¹¹ We have similar items from Islamic (Abbasid) times.

THE SWEDISH JORDAN EXPEDITION 2014 AT TALL ABU AL-KHARAZ • PETER M. FISCHER & TERESA BÜRGE • 165







Fig. 12. Glass flask L53-1 from Area 12, Phase XIV (photograph by T. Bürge).



Fig. 13. Destruction layer of room from Phase XIV with stone pavement (background), loom weights (centre) and broken storage vessels, Area 12, Phase XIV (photograph by T. Bürge).

room of this compound is enclosed by W755, W752, W772¹² and W771. The eastern part is stone-paved (dimensions 3.5 m \times 2 m) and contained two complete juglets (N1493, L47-2 in *Fig. 17:4*) and an iron arrowhead. A circular pivot stone (L47-6) was reused and incorporated in the stone pavement. West of the stone pavement is an earth floor (dimensions 3.8 m \times 3.5 m), its level being approximately 0.3 m lower than the stone pavement. Two 0.3 m \times 0.2 m stone slabs west of the pavement functioned as steps. The earth floor is subdivided by a 0.4 m wide partition wall. The area north of the partition did not contain any finds of interest due to its position close to the surface. South of the partition wall there is a deposit of 67 doughnut-shaped loom weights of unfired clay (L47-11). The loom weights were stored in several layers, of which the uppermost were secondarily fired in the conflagration, which followed the destruction of Phase XIV, and are therefore best preserved (*Fig. 13*). The lower-positioned loom weights were partly broken by the collapsing building and appeared mainly as a layer of very compact clay. A bone shuttle and a small bone tube were found close to the loom weights. A conical object of unfired clay deriving from the same spot might also be related to textile production. A thin-walled bowl, certainly imported (L47-1; *Fig. 17:1*), was found on top of the loom weights. Its position points to the one-time existence of a second storey of the building. Other finds from this room include another

 $^{^{\}rm 12}~$ Mudbricks from W772 are preserved.



Fig. 14. Selected finds from Area 12, Phase XIV: bowl (1), incense cup (2), Cypriote imported jug (3) and bichrome-decorated juglets (4, 5) imitating Cypriote originals and locally-made juglet (drawing by M. Al-Bataineh).

thin-walled bowl with horizontal incisions (L47-5; *Figs. 14:1* and *17:2*), two storage jars (L47-8 in *Fig. 16:2*; and L47-9), two cooking pots (L47-3 in *Figs. 16:3* and *17:7*; L47-10), a lamp (L47-4), a spindle whorl of limestone (N1492; *Fig. 23:3*) and a stone weight/pivot stone (L47-7). In the southern part a cistern was exposed, which belongs to an earlier phase and was backfilled in order to build W772.

There are two trapezoid spaces to the south: the eastern space is enclosed by W772, W752, W775 and the mudbrick wall W778 (dimensions $2/2.4 \text{ m} \times 2 \text{ m}$). It could be reached through an entrance in the eastern part of W772. The room contained a bichrome decorated juglet (N1494; *Figs. 14:5* and *17:6*), a monochrome decorated juglet (L61-1; *Figs. 14:4*

and *17:5*), a globular jug with red decoration (L61-3; *Figs. 14:3* and *19*) and fragments of another jug with linear decoration (L61-5). All four vessels resemble Cypriote and Phoenician pottery.¹³ Other finds are two bowls (L61-6, -7), a chalice (L61-2) and another, undecorated, juglet (L61-4; *Fig. 14:6*).

The room to the west (dimensions $2.4 \text{ m} \times 3.3 \text{ m}$) is bordered by W772, whose western part is not preserved due to its proximity to the surface, W778, W775 and W771. This room

¹³ This has been partly confirmed by V. Karageorghis who wrote on 14 October 2014 that the two juglets imitate Cypriote shapes of the second half of the 8th century BC, perhaps Black-on-Red II (iv). This agrees very well with our dating of Phase XIV.





Fig. 15. Selected finds from Area 12, Phase XIV: three-handled jug with false spout (1), strainer-jug (2) and decanter (3); (drawing by M. Al-Bataineh).

contained a storage jar (L67-3), a loom weight of unfired clay (L67-2), a spindle whorl of clay (N1496; *Fig. 23:2*) and a polishing stone (L67-1).

The room to the south, bounded by W775, W752, W784 (and W771?), was largely affected by a looters' pit (3 in *Fig. 4*). Only the northern and eastern parts, along W775 and W752, were undisturbed. However, several complete finds could be retrieved: a jar with a perforated rounded base (L68-2; Fig. *16:2*),¹⁴ a decanter (L71-1; *Fig. 15:3*), a cup/bowl of limestone (L71-2) and a large storage jar (L71-3). Of special interest is a three-handled jug with a false spout (L68-1; Figs. 15:1 and 18:2) found in the eastern part of the room. Antlers of a fallow deer (?)¹⁵ were found just north of it (Fig. 20). There is

Fig. 16. Selected finds from Area 12, Phase XIV: "strainer-jar" (1), storage jar (2) and cooking pot (3); (drawing by M. Al-Bataineh).

an outdoor area south of this room, where two cooking pots (L69-1, -2) were found.

The eastern parts of two additional rooms were exposed in the west, bordered by W770 and W771. The northern one is stone paved, while the southern one has a beaten earth floor. The latter contained a krater (L52 lower-1),¹⁶ a cooking pot (L52upper-2) and a small jug with two strainers of a shape which is unique at Tall Abu al-Kharaz (L52upper-1; Figs. 15:2 and 18:1): one strainer is integrated into the neck and the other one is part of the spout on the belly. The vessel has a red slip, is burnished and has a black linear decoration.

The function of the Phase XIV structures is domestic. While the remains of Phase XIV in the area east of W754 are limited and an exact interpretation of these spaces is difficult,

¹⁴ Parallels from Tel Batash, Stratum II: Mazar & Panitz-Cohen 2001,

pl. 35:9; Megiddo Stratum VA: Loud 1948, pl. 89:4.

Cf. Fischer 2013, 473.

¹⁶ L52 was divided into an upper and a lower layer. The upper layer is close to colluvial soil but it certainly belongs to Phase XIV.



the area between W752 and W754 can be interpreted as a passage between two buildings. The finds from the northernmost exposed structure hint at weaving activities and food production. The largely exposed building to the south has a rectangular layout, which does not correspond to the four-room houses in Area 7.¹⁷ This building was partly roofed, the courtyard was most likely an open space. Vessels and other objects were obviously stored on the roof or in the second storey, as indicated by the position of the bowl L47-1 (see above). Most rooms were used for storage, weaving and spinning, cooking and food processing. The assemblage of the four imported vessels and the absence of large storage vessels or cooking pots in the central-eastern room are striking and hint at a "representative" function of the room (see reconstruction in *Fig. 21*).

As already observed in previous seasons, Phase XIV came to a violent end, most likely caused by the Neo-Assyrian invasion of Transjordan by King Tiglath-Pileser III.¹⁸ A destruction layer consisting of secondarily fired mudbricks, carbonized wood, ash and fallen stones covered the entire area. Walls and stone pavements were blackened and the pottery and other finds, such as the loom weights, showed traces of a heavy conflagration.

Fig. 17. Selected finds from Area 12, Phase XIV: bowls, incense cup, juglets and cooking pot (photographs by T. Bürge).



Fig. 18. Selected finds from Area 12, Phase XIV: three-handled jug with false spout and strainer-jug (photographs by T. Bürge).

¹⁷ Fischer 2013, 489, fig. 449 and text.

¹⁸ Fischer 2013, 459, 515, 516.



Fig. 19. Imported jug L61-3 from Area 12, Phase XIV (photographs by P.M. Fischer and T. Bürge).



Fig. 20. Fallow deer antlers, Area 12, Phase XIV (photograph by P.M. Fischer).



Fig. 21. 3D reconstruction of Phase XIV compound, Area 12 (by S. Lauscher).



Fig. 22. Jug N1491 from Area 12, Phase XIII (photograph by T. Bürge, drawing by M. Al-Bataineh).

Fig. 23. Textile production tools from Area 12, Phases XV–XIII (photographs by P.M. Fischer).

Phase XIII (800-770 BC)

The dominating structures are two massive stone walls which run, approximately 12 m apart, almost exactly north–south. The western W768 is 1.2 m (C in *Fig. 4*) and the eastern W754 is 0.8 m wide (B in *Fig. 4*). From W768 run two, only partly exposed, perpendicular walls of the same size towards the west (W773 and W786). They are roughly 10 m apart. The eastern W754 includes a gate, approximately 1.6 m wide. The gate, where most likely a wooden door was placed, is built of large ashlar blocks of stone. The threshold of the gate also functioned as a step up to the higher placed area to the east, viz. the summit of the upper plateau. All these structures were definitely visible for the settlers of Phases XIV and XV and consequently were integrated into their structures (see above).

Most finds from this phase are from the area east of W768 (L51, L56, L57, L59, L64) and include a carinated bowl (L51-2), a bowl of the "T-rim" type (L51-6), another bowl (L57-2), an incense cup (L56-2), three kraters (L51-1, -5, L56-1), a complete jug with red decoration (N1491; *Fig.* 22), another jug (L59-4), a juglet (L51-7), four cooking pots (L51-3, L57-1, L59-1, -2), a lamp (L51-4) and a grinding stone. There is a pit (L58) in the northern part of the exposed area, east of W768, where a residual Early Bronze Age spindle whorl/loom weight of basalt (N1490; *Fig.* 23:4) was found. A carinated bowl (L65-2), a black juglet (L65-1) and a holemouth-jar (L65-3) were found in the area west of W768 and north of W773. Finds from the portion west of W768 and south of W773 (L50, L54, L63) are a large carinated bowl (L63-1),

a rounded bowl (L63-2), a jar with red decoration (L50-1), a cooking pot (L63-3) and a "pattern needle" of bone (N1488; *Fig. 23:6*).

The function of these structures was certainly not domestic. The space between these four walls, 12 m and 10 m respectively, is too wide to be covered by a roof which would have needed additional support of which no traces were found.¹⁹ Therefore we suggest a defensive function: these walls were used as an inner defence line when the outer defence, the city wall along the edge of the upper plateau, had been overrun by an enemy.

Phase X (1050-930 BC) or Phase IX (1100-1050 BC)

Remains of Phases XII and XI were not found, most probably because of intense building activities in Phases XIII and XIV. There is, nevertheless, firm evidence of Early Iron Age occupation, namely either Phase X or Phase IX (*Fig. 24*),²⁰ which is based on several complete ceramic containers belonging to either phase. Most structures were built in the Late Bronze Age (see below), reused in the Early Iron Age and partly covered by later structures. These are: W785, W763, W762, W764, W756, W757, W758 (?), W759, W760 and W761/W751.

¹⁹ At Tall Abu al-Kharaz roof supports are commonly slabs of large flat stones on which wooden pillars rested.

²⁰ Cf. the reports on Iron Age I occupation from Area 9 in Fischer 2012 and Fischer & Bürge 2013.



Fig. 24. Plan of Area 12, Phase X/IX (drawing by M. Al-Bataineh).

Only W753 and W788 in the south were possibly built in the Early Iron Age.

West of W758 and W762 and north of W753, below an approximately 0.3 m thick destruction layer of mudbricks, stones, carbonized wood and ash (L14, L17), a beaten earth floor appeared (L25, L28, L35, L37) covered by a fine layer of ash. A small rectangular container of unfired clay was exposed in the south-western part and an oven (L29) surrounded by a stone bench was next to W758. Several complete objects were found on the floor: a one-handled jug (L25-2; *Fig. 25*), which according to the soot marks was probably used for cooking, a spindle whorl of stone (N1485; *Fig. 23:5*) and a stone weight (N1486). A grinding stone (L25-1) was found next to the jug. It was either part of a larger grinding installation—four more grinding stone fragments were found next to it—or it was reused as a working space together with the other grinding



Fig. 25. Jug L25-1 from Area 12, Phase X or IX (photograph by T. Bürge).



Fig. 26. Storage jar L37-2 from Area 12, Phase X or IX (photograph by T. Bürge).

stones. Two storage jars (L37-1, -2; *Fig. 26*) were partly buried in the ground in the south-western corner of the space. A large number of unfired pottery fragments from the southern part (L28) hint at local pottery production.

Test trenches were dug in the south-eastern part of the opened-up area (L30, L31, L38, L42), where a typical Early Iron Age cooking pot with a triangular rim section (L30-1) was found.

LATE BRONZE AGE (1525-1350?)

A number of previously described walls were originally built in two phases during the Late Bronze Age. The structures belonging to the older phase are W785, W763, W764, W756, W757, W758 (?), W759, W760 and W761/W751. In a later phase W762 was built, which cut W763, W754 and W761/ W751 (*Fig. 24*). The large amount of Late and Early Bronze Age pottery found in two test trenches west of W762 (L40, L41) and the lack of Iron Age remains confirmed the attribution of these structures to the Late Bronze Age.

EARLY BRONZE AGE (AROUND 3000 BC)

A deep sounding in Trench LXVD exposed remains belonging to the Early Bronze Age. W765 and the associated Locus 39 with Grain Wash and Band Slip Wares could be ascribed to any of Phases I–III but the most likely is Phase I or II.

Results from the excavations in Area 13 (Trenches LXVIIA–D; *Figs.* 27 and 28)

IRON AGE

The phasing of the excavated area of only 100 square metres is tentative. Additional excavations of a larger area are necessary to place the three phases chronologically correctly in the Tall Abu al-Kharaz sequence.

Phase XV (732-600 BC)

The settlers of this phase reused the well-built stone structure of the previous phase. There is a passage with a door socket in the older W781 (cf. *Fig. 29*). From this entrance an outdoor area could be reached to the south where an oven, approximately 0.65 m in diameter, was found.

Phase XIV (770-732 BC)

A well-built rectangular stone structure, 7.2 m × 6 m, belongs to this phase (W780, W777, W787, W781; *Fig. 29*). The interior space has stone pavements in the north-eastern and the south-western corners whereas the remainder has a clay floor. The regularity of the paved areas points to intentionally arranged stones, maybe two working places. It is most likely that the space was roofed; however, there are no traces of flat stone slabs on which a wooden post could have been placed in order to support the roof.²¹ The interior space did not contain any finds of interest. The north-western corner is disturbed by a looter's pit.

Finds outside and north of this structure are tentatively ascribed to this phase: a krater (?) with a false spout (L8-1), a red-slipped and burnished jug (L7-1) and another jug with red decoration (L7-2). West of the structure is an empty container of reused ceramic plates (roof tiles?; *Fig. 30*).

²¹ Considering the long inner distance from east to west, a roof support seems to be necessary.



Fig. 27. Aerial photograph of Area 13 (by P.M. Fischer and T. Bürge).

Fig. 28. Section 5-14, west section of Trenches LXVIIA and D (drawing by M. Al-Bataineh).



Phase XIII (800-770 BC)

There are the remains of a rectangular structure (W782 with a mudbrick superstructure W776, W783; Fig. 31). It is approximately 7 m \times 3 m in size (as preserved). The north-western and the eastern parts are disturbed and large portions of the walls are missing. The space, clearly domestic in nature, contained numerous ceramic vessels and a unique object of iron and probably lead (Fig. 32). The conical object is approximately 25 cm long with an outer diameter of 7 cm. There was a small lid, still in situ on the open end whereas the other side is closed. Other finds include a bowl (L12-2), a cup (L12-1), a large krater (L11-1; Fig. 33:3), a juglet (N1495; Fig. 33:2), a faience bead (N1498) and an iron arrowhead. A discoid spindle whorl of clay (N1497) was found in the north-eastern part of the exposed area. A "T-rim" bowl with trumpet handle (L22-1; *Fig. 33:1*) and the leg of a tripod bowl of clay (L26-1) derive from south of the structure.



Fig. 30. Container of reused ceramic tiles from Area 13, Phase XIV (photograph by P.M. Fischer).



Fig. 31. Plan of Area 13, Phase XIII (drawing by M. Al-Bataineh).



Fig. 32. Iron/lead object in situ, *Area 13, Phase XIII (photograph by P.M. Fischer).*

Conclusions

The main objectives of the 2014 season of excavation at the city of Tall Abu al-Kharaz were fulfilled. They included the investigation of the area around the geographical centre of the city (Area 12) and the extension of Area 7 towards the south (Area 13; see the overview of the entire tell in *Fig. 34*). In accord with the general object of the project preference was given to further investigation of the Iron Age sequence, i.e. the period from the 12th to the 7th centuries BC that corresponds to the local phases IX–XV (*Fig. 35*). A good start has been made; however, we need to explore a larger area in the central part of the city in future seasons in order to get a clearer picture.

The 30-year-old female, dated to either Byzantine or Abbasid times, was buried under tons of material deriving from Iron Age structures. A forensic expert is at present investigating the remains in order to extract additional information.

Phase XV, once again, makes the squatter character of this Late Iron Age society obvious: the older structures were reused for dwellings and only a few new structures appeared. The situation in the preceding Phase XIV is totally different: we exposed remains of a thriving society. The fierce destruction of Phase XIV by the Neo-Assyrian king Tiglath-Pileser in



Fig. 33. Selected finds from Area 13, Phase XIII (drawing by M. Al-Bataineh).

732 BC followed by an extensive conflagration marks the end of large-scale occupation at Tall Abu al-Kharaz. The settlements following the total collapse of the Late Iron Age city of Tall Abu al-Kharaz during Roman, Byzantine, Islamic and Mamluk times are of only minor magnitude. The Phase XIV occupants had intercultural contacts with the Eastern Mediterranean, Phoenician and Neo-Assyrian sphere of culture which can be seen in the pottery which was either imported or at least locally copied.²² One can associate, for instance, the presence of vessels, which are related to Cyprus, to élite households. The thick fabric of our small "Cypro-Geometric" juglets (Figs. 14:4, 5 and 17:5, 6) and the bichrome decoration in the "wrong" colours excludes the possibility that they were imports from Cyprus dating to the Cypro-Geometric III period, although they demonstrate a high level of craftsmanship and almost identical shapes compared to the Cypriote originals.²³ We agree with V. Karageorghis (n. 13 above)

that they imitate Cypriote shapes of the second half of the 8th century BC, perhaps Black-on-Red II. In this respect, the Cypriote dates are in precise accord with the long established chronology of Phase XIV at Tall Abu al-Kharaz.²⁴ The large "Cypro-Geometric" jug (*Figs. 14:3* and *19*) is a different case: although the red colour of the decoration would not qualify it as a representative of the Cypro-Geometric repertoire of wares and shapes, the fabric is very thin and of high quality which corresponds to Cypriote originals. One has to remember that Phase XIV suffered a severe conflagration and many vessels became secondarily fired. This situation opens up for the possibility that the colour of the paint changed because of exposure to high temperature under oxidizing conditions. Consequently, we suggest that this jug represents a probable Cypriote original. As regards other, locally made, vessels, we found a number of totally new shapes.

Most spaces from Phase XIV were used for textile production including spinning, weaving and pattern sewing, storage,

 $^{^{\}rm 22}\,$ Here, locally means the Southern Levant.

²³ Petrography and INAA are planned.

²⁴ Summarized in Fischer 2013, 516.



Fig. 34. Overview entire tell (12 ha.) at the end of the 2014 season of excavation (cf. Fig. 3).



Licensed to <openaccess@ecsi.se>

food processing and the preparation of meals. In addition to remains of caprines and cattle, which dominate, the presence of almost the complete antlers of fallow deer in Phase XIV fits well with our previous osteological investigations.²⁵ Fallow deer is represented at Tall Abu al-Kharaz by 2.8% of the total number of identified fragments in all periods, and by 5.7% of the total weight. Fallow deer and gazelle were clearly of some significance to the people of Tall Abu al-Kharaz: deer are more abundant in the Iron Age in comparison with gazelle which runs concurrently with the decrease in the relative abundance of gazelle from the Early Bronze Age to the Iron Age. The find position of the antlers from 2014 suggests they were kept as a trophy and/or stored for later use for the production of horn tools.

The function of the Phase XIII structures (800–770 BC) was certainly not domestic and we suggest that they had a military purpose: they were used as an inner defence line when the outer defence, the city wall along the edge of the upper plateau, had been overrun by an enemy.

Early Iron Age remains from Phases IX or X (1100–930 BC) are relatively scarce—although we were able to excavate several complete containers mainly for storage—because of intense building activities in the later Iron Age. We found evidence of local pottery production in this period. Structures from the Late and Early Bronzes are abundant and were reused by the Iron Age people.

PETER M. FISCHER Professor of Cypriote Archaeology Department of Historical Studies University of Gothenburg Contact: Dörjeskärsgatan 37, SE-421 60 Västra Frölunda peter@fischerarchaeology.se

TERESA BÜRGE Institute for Oriental and European Archaeology Department for Egypt and the Levant Austrian Academy of Sciences A-1010 Vienna teresa.buerge@gmx.de

Bibliography

- Fischer, P.M. 1986. Prehistoric Cypriot skulls (SIMA, 75), Göteborg.
- Fischer, P.M. 2006. *Tell Abu al-Kharaz in the Jordan Valley* Vol. 2. *The Middle and Late Bronze Ages* (Contributions to the Chronology of the Eastern Mediterranean, 11), Wien.
- Fischer, P.M. 2008. *Tell Abu al-Kharaz in the Jordan Valley* Vol. 1. *The Early Bronze Age* (Contributions to the Chronology of the Eastern Mediterranean, 16), Wien.
- Fischer, P.M. 2012. 'The Swedish Jordan Expedition 2009 and 2010 at Tall Abu al-Kharaz. Preliminary results from the Early Iron Age occupation in Area 9', *OpAthRom* 5, 165–185.
- Fischer, P.M. 2013. *Tell Abu al-Kharaz in the Jordan Valley* Vol. 3. *The Iron Age* (Contributions to the Chronology of the Eastern Mediterranean, 34), Wien.
- Fischer, P.M. & T. Bürge 2013. 'The Swedish Jordan Expedition 2011 and 2012 at Tall Abu al-Kharaz. Preliminary results from the Early Iron Age occupation in Area 9', OpAthRom 6, 307–338.
- Fischer, P.M. & T. Bürge 2014. 'The Swedish Jordan Expedition 2013 at Tall Abu al-Kharaz. Preliminary results from Areas 9, 10 and 11', *OpAthRom* 7, 129–148.
- Loud, G. 1948. *Megiddo* II. *Seasons of 1935–39* (OIP, 62) Chicago.
- Mazar, A. & N. Panitz-Cohen 2001. *Timnah (Tel Batash)* II. *The finds from the first millennium BCE* (Qedem, 42), Jerusalem.
- Wild, E.M. & P.M. Fischer 2013. 'Chapter 4: Radiocarbon dating', in P.M. Fischer, *Tell Abu al-Kharaz in the Jordan Valley* Vol. 3. *The Iron Age* (Contributions to the Chronology of the Eastern Mediterranean, 34), Wien, 457–461.

²⁵ Fischer 2013, 473.

Licensed to <openaccess@ecsi.se>